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NORTHAMPTONSHIRE COUNTY COUNCIL



# Annual Report

OF THE

MEDICAL OFFICER  
OF HEALTH

FOR THE YEAR

1952



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NORTHAMPTONSHIRE COUNTY COUNCIL



# Annual Report

OF THE

MEDICAL OFFICER  
OF HEALTH

FOR THE YEAR

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## PUBLIC HEALTH OFFICERS OF THE AUTHORITY.

### Whole-time Officers of the County Council.

#### *County Medical Officer of Health—*

C. M. SMITH, O.B.E., M.A., M.D., Ch.B., D.P.H.

#### *Deputy—*

D. A. McCracken, M.D., Ch.B., D.P.H. (*Resigned 30/9/52*)

M. J. Pleydell, M.C., M.D., B.S., D.P.H. (*Commenced 1/10/52*)

#### *Assistants—*

J. T. Murphy, M.B., B.Ch., B.A.O., D.P.H.

P. X. Bermingham, M.B., B.Ch., B.A.O., D.P.H.

A. Lucas, L.R.C.P., L.R.C.S., L.R.F.P.S., D.P.H.

W. H. P. Minto, M.B., Ch.B., D.P.H. (*Resigned 22/4/52*)

H. A. H. Summers, M.B., B.Ch., B.A.O., D.P.H. (*Commenced 1/9/52*)

Muriel C. Goodchild, M.R.C.S., L.R.C.P., D.C.H.

Mary G. H. Dickson, M.R.C.S., L.R.C.P., D.P.H.

Nora V. Crowley, M.B., B.Ch., B.A.O., D.C.H.

R. Marx, M.B., B.Ch., B.A.O. (*Part-time*) (*Left 30/6/52*)

#### *Chest Physician (Part-time)—*

G. B. Lord, M.D., Ch.B.

#### *School Medical Officers—*

Dr. C. M. Smith

Dr. M. J. Pleydell (*Deputy*)

Dr. J. T. Murphy

Dr. P. X. Bermingham

Dr. A. Lucas

Dr. H. A. H. Summers

Dr. M. C. Goodchild

Dr. M. G. H. Dickson

Dr. N. V. Crowley

#### *Dental Surgeons—*

I. Faulds, L.D.S., R.F.P.S.(Glasg.) (*Senior*)

C. M. Perry, L.D.S.

R. J. H. Corfe, L.D.S.

J. P. Finnan, L.D.S.

Mrs. F. M. Jones, L.D.S. (*Part-time*)

#### *Food and Drugs Acts : Chief Inspector—*

A. E. Waller

#### *Superintendent Nursing Officer—*

Miss W. M. Williams

#### *Assistant Superintendent Nursing Officers—*

Miss S. H. Buchanan

Miss S. M. A. Beall

Miss F. M. Rogers

Miss E. F. Billington



*County Health Visitors—*

Miss R. Crawford	Miss J. M. Jackson
Miss D. B. Prewett ( <i>Retired 23/1/52</i> )	Miss S. Foster ( <i>Resigned 10/4/52</i> )
Miss G. B. B. Millgate	Miss B. P. Marston
Miss R. H. Crompton ( <i>Retired 31/10/52</i> )	Miss M. E. Swingler ( <i>Resigned 12/4/52</i> )
Miss K. P. Green	Miss B. Jackson
Miss L. H. Waugh	Miss E. G. Roe
Miss E. Myerscough	Mrs. E. N. Puttock
Mrs. M. Wilson ( <i>Part-time</i> )	Miss B. J. Lewis
Miss S. R. M. Miller	Miss W. D. Carpenter ( <i>Resigned 5/3/52</i> )
Miss M. A. Hunter	Miss P. M. Rymer
Miss M. J. Hunter	Miss A. M. Sadler
Miss K. W. Pulley	Miss M. M. Kemp
Miss D. G. Stokes	Miss E. G. Smith ( <i>Commenced 14/1/52</i> )
Mrs. M. P. Loasby	Miss E. J. Eyre ( <i>Commenced 21/4/52</i> )
Miss B. G. Partridge	Mrs. M. Way ( <i>Commenced 19/5/52</i> )
Miss P. A. Wallis	Miss R. M. Smith ( <i>Commenced 16/6/52</i> )
Miss M. A. Hunting ( <i>Part-time</i> )	Miss S. V. Archer ( <i>Commenced 15/9/52</i> )
Miss H. H. Douglas ( <i>District Nurse-Midwife/Health Visitor</i> )	
Miss I. Scott ( <i>District Nurse-Midwife/Health Visitor</i> )	
Miss E. B. Mowbray ( <i>Commenced District Nurse-Midwife/Health Visitor 20/4/52</i> )	
Mrs. J. E. I. de Lima ( <i>Commenced District Nurse-Midwife/Health Visitor 26/7/52</i> )	
Miss M. Jarrett ( <i>Commenced District Nurse-Midwife/Health Visitor 26/7/52</i> )	
Miss D. G. Allen ( <i>Commenced District Nurse-Midwife/Health Visitor 10/8/52</i> )	

*Duly Authorised Officers and Mental Welfare Officers—*

Miss J. E. Minnis, B.A., Dip. Soc.  
 E. Towning, Cert.R.M.P.A.  
 S. A. Crouch

*County Sanitary Officer—*

R. E. T. Chinnery, M.I.S.E.

*Clerical Staff—*

S. E. Bierton ( <i>Chief Clerk</i> )	Miss C. Loweth
R. J. Bruce	Miss E. M. Green ( <i>Part-time</i> )
P. J. Chamberlain	Miss D. Tomlin
E. W. Smart	Miss Maureen Ellerton
P. H. J. Wilkinson	Mrs. D. I. Wood
S. A. Crouch	Miss P. A. Watson
R. C. Miller	Miss Margaret Ellerton
R. W. Salmons	Miss R. H. Clipson ( <i>Resigned 31/12/52</i> )
S. Harris, Cert. S.I.B.	Mrs. M. M. Smith ( <i>née Gwillim</i> )
C. S. Mobb	Miss A. E. Watson
R. E. Loveys	Miss J. E. Watson ( <i>Resigned 11/10/52</i> )
J. Going ( <i>On National Service</i> )	Miss E. A. Perry ( <i>Commenced 3/3/52</i> )
Miss M. Spencer	Miss R. J. Carter ( <i>Commenced 27/10/52</i> )
Miss P. J. Wadwell	

## NORTHAMPTONSHIRE COUNTY COUNCIL.

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*June, 1953.*

*To the Chairman and Members of the Northamptonshire County Council.*

MR. CHAIRMAN, MY LORDS, LADIES AND GENTLEMEN,

I have the honour to present the Fifty-sixth Annual Report of the County Medical Officer of Health.

The evidence afforded by vital statistics shows that the improvement in the health of the County which has been recorded in past years has been maintained. The birth rate of 15.50 per thousand population is very little less than the rate recorded last year. The death rate from all causes, 11.04 per thousand population, is less than last year when the rate recorded was 12.13. The chief causes of death were : " Other Heart Disease " (631), Vascular Lesions, etc. (445), Cancer (442), Coronary Disease—Angina (342) and Bronchitis (130). It will be observed that the chief causes of death, with few exceptions, affect persons in middle age and later life. As the average age of the population rises, the number of deaths from cancer will increase until more is known about the cause of this disease. Coronary disease is thought to be one of the penalties paid for the increasing tempo at which life is now lived.

It is indeed gratifying to be able to record a fall in the infant mortality rate to 24.96 per thousand. This is slightly less than the rate for last year and it is the first time the rate has been under 25 per thousand.

The death rate from tuberculosis again showed a small decline from 0.26 to 0.25 per thousand population. More cases are being brought to light with improved methods of ascertainment.

The work of the Department continued on the usual lines during the year. It again proved impossible to recruit the required numbers of health visitors and district nurse/midwives and staff shortages undoubtedly cause great difficulty.

The Ministry of Health in August, 1952 asked that Medical Officers of Health to Local Health Authorities should, as some years' experience was now available of the working of the National Health Service, include in their Annual Reports for 1952 a special survey of the Service. As the Department asked that the survey report should be submitted by the end of February, it had to be sent to the Ministry before the vital statistics were received from the Registrar-General and before this annual report could be prepared. The survey report on each particular branch of the work is included in the appropriate section of this report.

I would like to thank the Chairman, Deputy Chairman and members of the Health Committee for the interest they have shown and for the support they have afforded to the work of the Department. To my colleagues, medical officers, nurses, health visitors and clerks I am greatly indebted for the work that has been done.

I have the honour to be,

Your obedient Servant,

CHARLES MILLIKEN SMITH,

*County Medical Officer of Health.*





## SECTION A.

## VITAL STATISTICS.

Area of the Administrative County .....	578,947 acres
Population (Census 1951—preliminary) .....	255,121
„ 1952, Mid-year estimate .....	258,500
Number of inhabited houses (Census 1931) .....	57,047
Number of families or separate occupiers (Census 1931) .....	58,964
Rateable Value (April 1st, 1952) .....	£1,352,555
Actual product of a penny rate (1951-52) .....	£5,268

	TOTAL	MALE	FEMALE	BIRTH-RATE <i>per 1,000 of the estimated population.</i>
Live births (Legitimate) .....	3,831	2,019	1,812	15.50
„ „ (Illegitimate) .....	175	98	77	
	4,006	2,117	1,889	

				<i>Rate per 1,000 Total (Live and Still) Births.</i>
Stillbirths (Legitimate) .....	79	44	35	20.54
„ (Illegitimate) .....	5	2	3	
	84	46	38	

				DEATH-RATE <i>per 1,000 of the estimated population.</i>
Deaths (all causes) .....	2,853	1,476	1,377	11.04
				<i>Rate per 1,000 Total (Live and Still) Births.</i>
Deaths from Pregnancy, Childbirth or Abortion .....		Deaths 1		0.24

Death-rate of infants under one year of age :—

All infants per 1,000 live births .....	24.96
Legitimate infants per 1,000 legitimate live births.....	24.80
Illegitimate infants per 1,000 illegitimate live births .....	28.57

Deaths from (a) Cancer .....	442
(b) Measles .....	1
(c) Whooping Cough .....	2

**Area.** There has been no change in the area of the Administrative County, which remains at 578,947 acres.

**Population.** The Registrar-General estimated the resident mid-year population for 1952 to have been 258,500 persons as compared with 256,700 in 1951. The estimated populations for the Urban and Rural areas were 136,100, and 122,400 persons respectively. The natural increase in population, i.e. the increase of births over deaths, totalled 1,153 persons. The estimated increase in population was 1,800 persons.

**Deaths.** The total number of deaths assigned to the County by the Registrar-General after adjusting for outward and inward transferable deaths, was 2,853, as compared with 3,112 in 1951. The crude death-rate, based on the mid-year estimated population, was 11.04, as compared with 12.13 in 1951. Lists of the causes of deaths, classified under the thirty-six headings based on the Abbreviated List of the International Statistical Classification of Diseases, Injuries and Causes of Death, 1948, as used for England and Wales, are given in Tables I. and II., pages 68—71, whilst the history of the rate, together with other vital statistics for 1897-1952, are shown in Table No. VI., page 76. Comparability Factors for each Urban and Rural District (Tables Nos. I. (a) and I. (b), pages 68—69) have been provided by the Registrar-General for adjusting the local birth and death rates. These comparability factors make allowance for age and sex distribution of the population in different areas. The factors may be stated to represent the population handicaps to be applied to the several areas; and when multiplied by the crude birth or death rates experienced in the area modify the latter so as to make them comparable with other rates which have been similarly adjusted.

**Births.** The number of live births assigned to the County was 4,006 (comprising 2,117 males and 1,889 females) as compared with 3,997 in 1951, thus giving a birth-rate of 15.50 per 1,000 of the population as compared with 15.30 for England and Wales.

**Stillbirths.** The number of stillbirths registered was 84 as compared with 99 in the previous year. This is equivalent to a rate of 0.32 per 1,000 of the population as compared with 0.35 for England and Wales. The rate per 1,000 of total births was 20.54 as compared with 24.17 for 1951.

**Infant Mortality.** The number of infants who died before attaining their first birthday was 100 (61 males and 39 females) as compared with 101 in 1951. Of these 100 there were 5 illegitimate births. The rate per 1,000 related live births was 24.96, which is below the rate of 27.60 for England and Wales. This is one death less than occurred last year which was then the lowest infant mortality rate ever recorded in the County. The number of deaths and the rates for 1897-1952 are shown in Table VI., page 76.

**Neonatal Mortality.** This sub-division of the infant mortality includes all infants who died within twenty-eight days of independent existence. Included in the total number of infants who died were 78 who were classified as neonatal deaths. Details of the certified causes of those deaths are given in Table II.(a) page 72. The rate per 1,000 live births was 19.5 as compared with 15.3 for 1951.

**Maternal Mortality.** One woman died from causes associated with childbirth as compared with four for the previous year. The maternal mortality rates per 1,000 live and stillbirths during the last decade were as follows :

	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952
Administrative County ... (Number of Deaths)	0.92 (4)	1.67 (8)	0.67 (3)	0.86 (4)	1.40 (7)	0.90 (4)	0.24 (1)	0.49 (2)	0.98 (4)	0.24 (1)
England and Wales	*2.29	*1.93	*1.79	*1.43	*1.17	*1.02	*0.98	*0.86	*0.79	*0.72

\* Including abortion.

## SECTION B.

### General Provision of Health Services.

The Survey Report was :—

#### 1. ADMINISTRATION.

The County Council have, subject to their Standing Orders, delegated to the Health Committee their powers and duties under the National Health Service Act, 1946.

To assist them in their duties, the Health Committee has appointed three Sub-Committees :—

- (i) **Maternity, Nursing and Care Sub-Committee** to which is delegated duties relating to Section 22—Care of Mothers and Young Children, Section 23—Domiciliary Midwifery, Section 24—Health Visiting, Section 25—Home Nursing, Section 26—Vaccination and Immunisation, Section 28—Prevention of Illness and After-Care, Section 29—Domestic Help.
- (ii) **Ambulance Sub-Committee** to carry out duties under Section 27.
- (iii) **Mental Health Sub-Committee** to discharge the functions of the Local Health Authority under Section 51.

It is a condition of delegation to the above Sub-Committees that they submit minutes of their proceedings embodying appropriate recommendations to the Health Committee.

Between meetings of Committees and Sub-Committees, any urgent matter which normally would be submitted to a Committee and which cannot be delayed until the next meeting is referred to the appropriate Chairman for a decision and, if necessary, authority to take action. The Chairman's decision is submitted to the next meeting of the Committee for confirmation.

At officer level, the County Medical Officer of Health is in charge of the Health Department and of all the services carried out under the Act. He has the assistance of a full-time Deputy Medical Officer whose departmental duties include the Mental Health Service, Vaccination and Immunisation, the Control of Milk Supplies and other duties.

To undertake the clinical duties at the Antenatal Clinics, Child Welfare Centres and Immunisation Clinics, there is a staff of four full-time lady medical officers and in addition, under the County Council Scheme under Section 111 of the Local Government Act, 1933, four of the District Medical Officers of Health are available to the equivalent of one and eight elevenths Medical Officers.

Medical staff meetings are held from time to time when new developments and current problems in the service are discussed.

After full consideration, the Health Committee decided that in Northamptonshire there was no need for decentralization of any of the functions of the Local Health Authority. The only service in which it has been necessary to make arrangements with neighbouring Local Authorities is the Ambulance Service.

#### 2. CO-ORDINATION AND CO-OPERATION WITH OTHER PARTS OF THE NATIONAL HEALTH SERVICE.

In a County of the size of Northamptonshire, the difficulties which have arisen by virtue of the administration of the Health Services by three separate authorities is possibly less than in other areas. To begin with, almost the whole of the County is served by two Hospital Management Committees—Northampton and District Hospital Management Committee and the Kettering



and District Hospital Management Committee. There is one Executive Council serving the entire administrative area. Co-ordination with the hospital services is secured first of all by the fact that four members of the Health Committee are also members of one or other of the Hospital Management Committees; for example, the Chairman of the Health Committee is Chairman of the Rushden House Sanatorium Sub-Committee of the Kettering and District Hospital Management Committee. Again, seven members of the Health Committee are members of the Executive Council where their presence has been effective in securing co-ordination, particularly in regard to the Ambulance Service.

At officer level, the County Medical Officer of Health has, since the appointed day, been a member of the Northampton and of the Kettering Hospital Management Committees and of several Sub-Committees. He has found it invaluable to have accurate and up-to-date information of the work of the Hospital Committees. For example, in 1952 a scheme was devised for general practitioners to attend their own cases in the Maternity Unit at the Park Hospital, Wellingborough. A small Medical Sub-Committee to prepare a scheme was set up and the County Medical Officer of Health, having been elected a member, was able to play a part in ensuring that co-operation was obtained with the Local Authority Antenatal Clinic services.

The County Medical Officer of Health is a member of the Medical Officers of Health Liaison Committee set up by the Oxford Regional Hospital Board. At the Liaison Committee any matters of doubt or difficulty are brought forward and discussed in an atmosphere of friendly and useful co-operation.

The County Medical Officer of Health is also a member of the following Sub-Committees of the Joint Medical Advisory Committee of the Hospital Board, namely, The Diseases of the Chest, the Paediatrics and Child Health, and the Chronic Sick Sub-Committees. The opportunity of meeting specialists either at the Medical Advisory Committees of the Hospital Management Committees or at the Regional Advisory Sub-Committees has proved beneficial in establishing good relationships which have assisted in promoting co-ordination of the service.

Membership of the Local Medical Committee has also proved invaluable in maintaining co-operation with the work of the general practitioners. When, in the course of the work of the Local Medical Committee, a matter arises which affects the Local Health Authority, the opportunity presented by being able to speak as a member of the Committee has been welcomed.

As regards ways in which medical officers, health visitors, midwives or nurses employed in the Local Health Services are co-operating in the care of patients under treatment (a) at hospitals (b) by general medical practitioners, the following comments are submitted :

(i) **MEDICAL OFFICERS.** The medical staff work in close co-operation with the hospitals in respect of the Antenatal Clinics. There is full consultation with the obstetric consultants. At the Child Welfare Centres, if a child is seen on whom a consultant opinion is desired, there is again close co-operation with the hospital consultant staff. A letter is sent to the general practitioner concerned stating that the case has been seen at the Child Welfare Centre and giving briefly the clinical grounds on which it is desired to refer the case to a specialist. The letter states that if the doctor desires to refer the case himself, he is, of course, perfectly at liberty to do so, but he is asked to be good enough to send a copy of the Hospital Report to the Department. The letter states that in the absence of a reply within a fortnight, the case will be referred to a specialist and a copy of the specialist's report will be sent to the practitioner.

The medical staff who attend the Welfare Centres, particularly the women staff, are enabled, through the courtesy of the Consultant Paediatrician, to accompany him on a ward round every Saturday morning. None of the medical staff has any hospital appointment and it is difficult to see how this could be arranged.

(ii) **HEALTH VISITORS.** The health visitors co-operate with the hospital service because they are frequently asked to submit reports on home conditions. On occasion, too, they have been asked to ensure that difficult follow-up advice is fully understood by the parents ; for example, the Consultant Paediatrician placed a child on a Lawrence diet. A copy of the appropriate instructions was forwarded to the health visitor so that she could explain in person how

the diet should be worked out. Some of the health visitors work in close co-operation with the general practitioners in their districts. The practitioners sometimes get in touch themselves with the health visitors in cases where they feel that the cause of the illness is attributable to adverse home circumstances.

(a) *At Hospitals.*

The midwives work in close touch with the hospitals : to begin with, when application is made for admission to a maternity ward, the midwife is asked to report on the home circumstances. Again, when a patient is discharged before the fourteenth day, the midwife is notified so that the necessary follow-up visits can be paid. Moreover, if any abnormality has occurred, the necessary information is transmitted from the hospital to the district nurse, generally through the Superintendent Nursing Officer.

The district nurses pay follow-up visits to patients discharged from hospital in special cases where this service is required ; for example, recently there was discharged from hospital a case in which a daily injection of streptomycin was required and it was arranged for the district nurse to carry this out.

A special scheme of co-operation with the Kettering and District Hospital Management Committee has been working since October, 1950. There was need to settle some machinery for deciding the order of priority of admission of chronic sick patients to hospital. As there was rather a large waiting list, it was consequently arranged that the Superintendent Nursing Officer or one of her Assistants would pay a visit to every case for which application for admission was received by the Hospital Management Committee. A report on the home circumstances and on the domiciliary nursing needs of the case was sent to the Consultant Physician in charge of the Geriatric Unit. This scheme has proved of value both to the Management Committee who were able to obtain a full report on the social needs for priority and also to the Health Committee because cases came to light of which no previous information was available and which needed domiciliary nursing attention pending admission to hospital. Though additional work fell on the Superintendent Nursing Officer and her staff, visits were often paid in the late evening and at week-ends to ensure that there was no delay in submission of reports. A further advantage to the Hospital Committee was, of course, that there was no need for the almoner to pay domiciliary visits and thus duplication of field workers was avoided and economy in administration was secured. When, in due course (April, 1953) the waiting list had been reduced to negligible proportions, the Management Committee was informed that there was no need to continue to give reports on which the order for priority admission could be decided. It was, however, gratifying to receive a request from the Hospital Committee to continue to submit the reports because they were found so valuable to the Consultant Physician. Accordingly, the reports are still being submitted although there is now not the same need for urgent visits to be made.

(b) *By General Medical Practitioners.*

The midwives, of necessity, work in close touch with the general medical practitioners who are very appreciative of their services. Under the Maternity Medical Services Scheme, practically all women who arrange to have their confinement at home book a doctor to attend them as well as the district midwife. The antenatal supervision and the duties at the confinement are shared between the doctor and the district nurse, who work together as a team.

With the increasing use of antibiotics, which are administered by injection, many of the general practitioners ask the district nurses to administer this form of treatment. Injections are thus taking up an increasing proportion of the time of the district nurse.

On the whole, arrangements for co-ordination and co-operation with other parts of the service are considered to work as well as could be expected, bearing in mind that the service is established under three different types of authority.

The Health Committee, following the publication of Circular 11/52 on co-ordination of the Health Services, decided that no useful purpose would be served by setting up a Consultative



Committee. They took the view that when it was necessary to consult either with a Hospital Management Committee or a Local Executive Council, it was preferable to hold a special meeting rather than to establish a Standing Consultative Committee.

*Steps taken to inform the general practitioners and the public.*

No guide on the Local Health Services has been issued either to the general practitioners or to the public. From time to time, as is necessary, circulars are sent to the general practitioners informing them of new developments in the service. When new welfare centres are being opened or when any alteration in the hours is being made, notices are inserted in the Local Press.

### 3. JOINT USE OF STAFF.

No doctors in general practice are employed by the Authority on a part-time or sessional basis, neither are any of the medical staff of the Authority employed in the hospital service.

Consultants employed by the Regional Hospital Board work in the Authority's service as follows :

(i) A Consultant Chest Physician is responsible under the County Medical Officer of Health for carrying out the Council's duties under Section 28 of the Act in relation to the prevention of tuberculosis. He also acts as general adviser to the County Medical Officer of Health in preventive work.

(ii) Ophthalmologists employed by the Regional Hospital Board conduct refraction clinics in premises owned or rented by the County Council, and at these clinics which are mainly held for the examination of school children, children under five can also be seen.

(iii) The two Ear, Nose and Throat Surgeons in the County hold special clinics for children at the hospitals. These are primarily for school children but children under five are also seen.

### 4. VOLUNTARY ORGANIZATIONS.

As stated in some detail under the appropriate Section, the County Council enjoys the assistance of Voluntary Organizations in relation to the Voluntary Services.

(i) **Tuberculosis Care Committees.** The Tuberculosis Care Committees, which are very active in Northamptonshire, play a prominent part on behalf of the welfare of tuberculous patients. Two of the Committees also combine their activities with welfare work for chronic sick and old people. The policy of the Health Committee has been to re-imburse approved secretarial and administrative expenses in order to enable the Tuberculosis Care Committees to spend all their voluntary funds on the welfare of the patients who are under their care.

(ii) **Ambulance Service.** The Ambulance Service is entirely delegated to Voluntary Ambulance Committees throughout the County. The County Council also co-operates with the W.V.S. in the provision of the Hospital Car Service.

(iii) **Rural Community Council.** The Rural Community Council has established an Old People's Welfare Committee of which the County Medical Officer of Health and the Superintendent Nursing Officer are both members. The Superintendent Nursing Officer has taken a keen interest in the welfare of old people and has played an active part in the formation of many of the Committees which have been established.

(iv) **Child Welfare Centres.** At the Child Welfare Centres, the Health Committee is supported by excellent and enthusiastic Voluntary Committees. The Health Committee regards the work of the Welfare Centre Voluntary Committees as essential in the successful administration of Welfare Centres.

## CARE OF EXPECTANT AND NURSING MOTHERS AND CHILDREN UNDER SCHOOL AGE (SECTION 22)

The Survey Report was:—

### Expectant and Nursing Mothers.

There are, in the County, twelve Antenatal Clinics, which are held twice weekly, weekly, fortnightly or monthly. A total of 44 clinic sessions are conducted every four weeks. The sessions are held in the Authority's own health clinics at Corby, Kettering and Wellingborough, but elsewhere in rented premises such as village halls and church halls. The clinics are staffed by women assistant medical officers whose other duties include the conduction of child welfare centres and school health service duties. The clinics are also attended by Assistant Superintendent Nursing Officers. Since the inauguration of the antenatal service in this County in 1931, the view has been taken that the clinics should be attended by the senior members of the district midwifery service rather than by health visitors. It is certainly a convenient arrangement because the Assistant Superintendent Nursing Officers, in their capacity as Assistant Non-Medical Supervisors of Midwives, can keep in close touch with the day to day work of the midwives who are encouraged to accompany their patients to the clinics. In some of the antenatal clinics serving the rural areas the mothers would frequently be unable to attend the clinic unless they were brought by the midwife. On occasion, when a midwife is unable to bring her patient, a hospital car is provided. At the clinics, the mothers receive regular obstetric supervision by the Medical Officers. Specimens are taken for Wassermann and Kahn tests, for Rh. factor, for blood grouping and for haemoglobin estimation. Any case that presents an obstetrical abnormality is referred either to the general medical practitioner, if the patient has booked one, or to a consultant obstetrician.

Considerable stress is laid on health teaching at the antenatal clinics. A list of lectures is prepared every month and circulated to all midwives whose duty it is to visit the clinics and give educational talks and demonstrations; the list informs the midwives on which date and on which subject they are expected to give a talk or demonstration. An extract from a specimen list is given:—

#### NORTHAMPTONSHIRE COUNTY COUNCIL

#### HEALTH DEPARTMENT

#### HEALTH TALKS AT ANTENATAL CLINICS

1953		<i>Subject</i>	<i>Speaker</i>
<i>Clinic</i>	<i>Date</i>		
Wellingborough	March 2nd	Hygiene of Pregnancy	Miss Allen
	5th	Baby's Layette	Miss Robinson
	9th	Gas and Air Analgesia	Mrs. Burridge
	12th	How Labour Begins	Miss Toseland
	16th	How to Relax	Miss Stoddart
	19th	Ante and Post Natal Exercises	Miss Johnson
	23rd	The advantages of attending the Antenatal Clinic	Miss Simonds
	26th	Why one should learn to relax early in Pregnancy	Miss Toseland

If, for any reason, a talk is not given, subsequent enquiry is made by the County Medical Officer of Health.

Since the inauguration of the National Health Service, there has been an increase in the number of women admitted to maternity homes for their confinement. Close co-operation is maintained between the County Health Department, the Consultant Obstetricians and the Secretaries of the two Hospital Management Committees in the County. Arrangements have been made under which the County Medical Officer of Health is entrusted with the selection of mothers who require admission to a maternity home on account of adverse social circumstances.



The procedure adopted is that the district nurse/midwife investigates the home circumstances of each applicant and gives her opinion as to whether or not the confinement should take place at home. At the antenatal clinics, the doctors and midwives discuss each case in relation to the need for admission. In many instances, the application is prompted by lack of anyone to assist in the home at the time of confinement. Even a home help may not meet all the requirements because the mother cannot be left unattended when the home help has finished her duties. With the reduction in the size of the average family, the difficulty of finding suitable relatives and friends to help at a confinement will tend to increase. In the days of the large family of the Victorian Era, there were few women who could not count on a relative to assist. Another factor making for difficulty is that there is an increasing tendency for men to move from one part of the country to another in the course of their careers. Families who have recently arrived in a district have obvious difficulty in finding friends or relatives to come to their aid. The number of cases booked per month on social grounds by the County Medical Officer of Health is :—St. Mary’s, Kettering—30 ; The Park Hospital, Wellingborough—35 ; The Barratt Maternity Home, Northampton—32 : a total of 97.

Some mothers who have booked a doctor to look after them at home during confinement attend the antenatal clinics for blood tests and health education.

There are two consultative antenatal clinics—one at Northampton General Hospital and one at Kettering General Hospital—to which cases are referred for advice.

Unmarried mothers generally attend the antenatal clinics, where blood tests are taken and the results forwarded to the Organizing Secretary of the Diocesan Moral Welfare Association.

Mothercraft training is included in the health education talks but no Mothers’ Evening Clubs have been instituted although I feel that such clubs would serve a useful purpose at Kettering, Corby, and Wellingborough, where they could be held in Local Authority Clinics. The present difficulty, however, is the lack of health visiting staff to organize these clubs.

Maternity outfits are supplied to all mothers from the antenatal clinics. The numbers issued have been : 1949—1,691 ; 1950—1,854 ; 1951—1,408 ; 1952—1,058.

**Antenatal Clinic Statistics.** The following table is submitted :

TABLE I.

<i>Year</i>	<i>No. of Clinics</i>	<i>No. of Sessions</i>	<i>Attendances (including post-natal attendances)</i>
1949	14	512	7,303
1950	14	528	8,696
1951	13	516	9,004
1952	12	536	10,031

It will be seen that there has been a rise in the number of attendances at antenatal clinics. To ascertain what proportion of women attending the clinics had booked a doctor or a midwife to look after them at home or had been selected for admission to hospital, an analysis has been made of the attendances in 1952. Here is a summary of the analysis :

**ANTENATAL CLINICS**  
**Analysis of Attendances—1952**

**A. Attendances**

(i) No. of new cases, i.e., women who had not previously attended an antenatal clinic or any other clinic during current pregnancy .....	1624
(ii) No. of patients who attended for antenatal supervision during the year :	
(a) Domiciliary midwifery cases (or due to be domiciliary cases) .....	243
(b) Domiciliary maternity cases (or due to be domiciliary cases) .....	107
(c) Hospital cases, i.e., confined in hospital or booked for admission to hospital .....	1623
(d) Total .....	1973

**B. Details of Maternity cases**

(i) (a) Cases where the doctor undertook to attend the delivery .....	64
(b) Cases where the doctor stated he wished to be called only if required .....	43
(c) Total (this total should be the same as A (ii) (b) .....	107
(ii) (a) Maternity cases who attended once only for booking .....	140
(b) Maternity cases who continued to attend for antenatal supervision .....	10

**C. Postnatal Cases**

No. of cases who attended for postnatal examination during the year and had not attended any other Clinic for postnatal examination after this confinement .....	709
--	-----

From the above table it is clear that by far the largest proportion of women who attend the clinics are those who are to be admitted to hospital. As will be shown later (page 30), the percentage of women confined in maternity homes and nursing homes has increased from 48% in 1949 to 59% in 1952. The increased attendances at the antenatal clinics are, therefore, due to :

(i) The close co-operation between Hospital Management Committees and the County Council under which antenatal supervision of cases booked for admission is carried out at the Council's clinics.

(ii) The increase in the number of women admitted to maternity homes.

(iii) The scheme for a definite programme of health education.

**Child Welfare Centres.**

The Local Health Authority provides 46 Child Welfare Centres. At Corby, Kettering and Wellingborough, the Centres are held in the Authority's own health clinics. Elsewhere, they are conducted in rented premises such as Church Halls and Village Halls. Some of the halls are reasonably suitable for the purpose but in a number the work has to be carried out under some difficulty. Very often, the weighing of the babies and toddlers has to be carried out in a corner of the hall behind screens and sometimes the room used as the doctor's consulting room is small and inconvenient. The clinics are attended by the Authority's full-time assistant medical officers, health visitors, some of the district nurses and members of the Local Welfare Centre Voluntary Committee. At eight centres, health visitors' sessions are held when the children come to be weighed; the health visitor gives a talk and discusses individual problems with the mothers : there is no medical consultation. The primary purpose of the centres is health supervision and education, and frequent talks and demonstrations are arranged. If the doctor desires to refer a child to the specialist, this is arranged after giving the family doctor the opportunity of referring the case himself. The Consultant Paediatrician at Northampton General Hospital is most co-operative in submitting reports on cases referred to him. As stated in Section 2 (1), the four lady medical officers on the staff very frequently attend the Saturday morning ward round of the Consultant Paediatrician at Northampton General Hospital.

The work of the Voluntary Committees at Welfare Centres seldom gets the recognition that it deserves. The Voluntary Committees are responsible for the social side of the centre activities. They translate what might otherwise be regarded by many mothers as a duty attendance into a social occasion. The Centres should be regarded as Mothers' Clubs at which the primary interest is the healthy rearing of infants. Members of the Voluntary Committee see to it that mothers entering a centre for the first time are welcomed and made to feel at home. The Voluntary Committee also assist in the sale of infant foods, nutritional supplements and so on, and in addition they usually organize summer outings and Christmas parties which are much appreciated by the mothers. One member of the Voluntary Committee is responsible for keeping a register of attendances ; very often, another member weighs the babies. On each occasion when a visit is made to a Welfare Centre, one is constantly struck by the excellence of the work done by the Voluntary Committee.

To afford as many mothers as possible an opportunity of attending the Centres, the Authority in the rural areas provides transport for which no charge is made.



### Care of Premature Infants.

Special outfits are available and held in reserve at convenient places in the County for the use of the district midwives when required. It is found, from experience, that the midwives take a very special interest in the care of premature babies ; these babies are also visited, as soon as reported, by the Assistant Superintendent Nursing Officers in order that they can be satisfied that all necessary facilities are available. If required, the district midwife may be relieved of part of her other duties to devote as much time as is needed to the nursing of the premature infant.

At the Barratt Maternity Home, Northampton, a Premature Baby Unit has been established within the last few years. The Unit accommodates twelve premature infants and, of course, is primarily for the use of the babies born in the Maternity Home.

Premature babies, however, born outside the hospital are admitted at the request of the general medical practitioner in charge. When premature babies are being discharged from hospital any special instructions about the care and feeding are passed on to the domiciliary midwife who is to receive the case. The importance of prematurity as a cause of stillbirths and neo-natal deaths is recognized and particular attention will be paid to this problem when the results of the Infant Health Survey, which has been carried out in the Health Department in conjunction with the Oxford Institute of Hygiene, are being considered.

### Supply of Dried Milks, etc.

Arrangements have been made with the Local Food Officer of the Ministry of Food for the distribution of welfare foods at many of the Child Welfare Centres in the County. With the recent closing of many of the Food Offices, increasing use is being made of the Welfare Centres. The policy that has been adopted is that while every facility is granted to the Ministry of Food, no expense must fall on the County Council and no duties must be undertaken by the health visitors. In practice, the Ministry of Food have been able to arrange for Voluntary Workers to undertake the distribution. Sometimes, as in the case of a Welfare Centre held monthly, the Ministry of Food arrange for the premises in which the Centre is held to be opened more frequently solely for the distribution of the foods.

Since 1919, the County Health Department has sold dried milks and various nutritional supplements at reduced prices at Welfare Centres throughout the County. In some parts of the County where Centre sessions are held fortnightly or monthly, arrangements have been made with a Local Voluntary Worker, or other suitable person, to sell foods from her own house so that they will be available at all times.

The view has always been taken that the welfare foods supplied by the Ministry of Food and sold by the Health Department, are available for any mother who visits the Centre, irrespective of whether she makes use of the Centre services. The sale and distribution of welfare foods is regarded as a proper function to be undertaken by the Health Department, and in practice very few mothers visit the Centres with the exclusive object of obtaining the foods.

Supplementary information usually included in the Annual Report is :—

#### A. Care of Mothers.

##### (i) NOTIFICATION OF BIRTHS.

The number of births notified in the area under Section 203 of the Public Health Act, 1936, as adjusted by transferred notifications was :

	<i>Live Births</i>	<i>Stillbirths</i>	<i>Totals</i>
Domiciliary .....	1,648	27	1,675
Institutional .....	2,346	59	2,405
	<hr/>	<hr/>	<hr/>
	3,994	86	4,080
	<hr/>	<hr/>	<hr/>



Of the 1,675 domiciliary births, 1,632 were notified by midwives and 43 by doctors or parents.

Details of all notifications are transmitted promptly to the Health Visitors in order that they can begin visiting after the fourteenth day.

(ii) CARE OF PREMATURE INFANTS.

The following is an analysis of premature live infants and stillbirths (i.e.,  $5\frac{1}{2}$  lbs. or less at birth, irrespective of the period of gestation).

*Premature Infants.*

(a) Number of premature live births at home .....	73
(b) Number of premature live births in private nursing homes .....	8
(c) Number of premature live births in maternity homes and hospitals in the National Health Service .....	137
(d) Total in the area .....	218

*Premature Stillbirths.*

(a) Number of premature stillbirths at home .....	10
(b) Number of premature stillbirths in private nursing homes .....	1
(c) Number of premature stillbirths in maternity homes, and hospitals in the National Health Service .....	9
(d) Total in the area .....	20

Weights in lbs. and oz.	Births at home							Births in private nursing homes						
	Pre- mature still- births	Premature live births						Pre- mature still- births	Premature live births					Trans- ferred to Hosp.
		Nursed entirely at home					Trans- ferred to Hosp.		Nursed entirely in private nursing home				Trans- ferred to Hosp.	
		Died in first 24 hrs.	Died on 2nd to 7th day	Died on 8th to 28th day	Sur- vived 28 days	Total			Died in first 24 hrs.	Died on 2nd to 7th day	Died on 8th to 28th day	Sur- vived 28 days		
3 oz. or less ...	—	1	—	—	—	1	1	—	—	—	—	—	—	—
2 lbs. 3 oz. up to and including 3 lbs. oz. ...	2	—	—	—	1	1	3	—	—	—	—	—	—	—
3 lbs. 4 oz. up to and including 4 lbs. oz. ...	5	1	—	—	6	7	6	—	—	—	—	2	2	—
4 lbs. 6 oz. up to and including 4 lbs. oz. ...	2	1	—	—	6	7	2	—	—	—	—	1	1	—
4 lbs. 15 oz. up and including 5 lbs. 8 oz. ...	1	1	2	1	39	43	2	1	—	—	—	5	5	—
Totals ...	10	4	2	1	52	59	14	1	—	—	—	8	8	—

Premature babies, whose mothers normally reside in the area, born in or admitted to maternity homes and hospitals in the National Health Service.

<i>Weights in lbs. and oz.</i>	<i>Births in hospital</i>						<i>Premature infants admitted after birth</i>				
	<i>Pre-mature still-births</i>	<i>Premature live births</i>				<i>Total</i>	<i>Died in first 24 hours</i>	<i>Died on 2nd to 7th day</i>	<i>Died on 8th to 28th day</i>	<i>Sur-vived 28 days</i>	<i>Total</i>
		<i>Died in first 24 hours</i>	<i>Died on 2nd to 7th day</i>	<i>Died on 8th to 28th day</i>	<i>Sur-vived 28 days</i>						
2 lbs. 3 oz. or less ...	—	6	2	1	1	10	—	1	—	—	1
Over 2 lbs. 3 oz. up to and including 3 lbs. 4 oz.	2	4	1	3	2	10	—	—	1	2	3
Over 3 lbs. 4 oz. up to and including 4 lbs. 6 oz. ...	4	3	5	—	38	46	1	—	—	5	6
Over 4 lbs. 6 oz. up to and including 4 lbs. 15 oz.	2	—	—	—	19	19	—	1	—	1	2
Over 4 lbs. 15 oz. up to and including 5 lbs. 8 oz. ...	1	2	2	—	48	52	1	—	—	1	2
Totals ...	9	15	10	4	108	137	2	2	1	9	14

(iii) OPHTHALMIA NEONATORUM AND PUERPERAL PYREXIA.

No cases of Ophthalmia Neonatorum were notified.

Thirty-three cases of Puerperal Pyrexia were notified ; four were domiciliary confinements and twenty-nine institutional.

All cases recovered.

## (iv) DEATHS ASCRIBED TO PREGNANCY OR CHILD BIRTH.

The Registrar-General reported one maternal death.

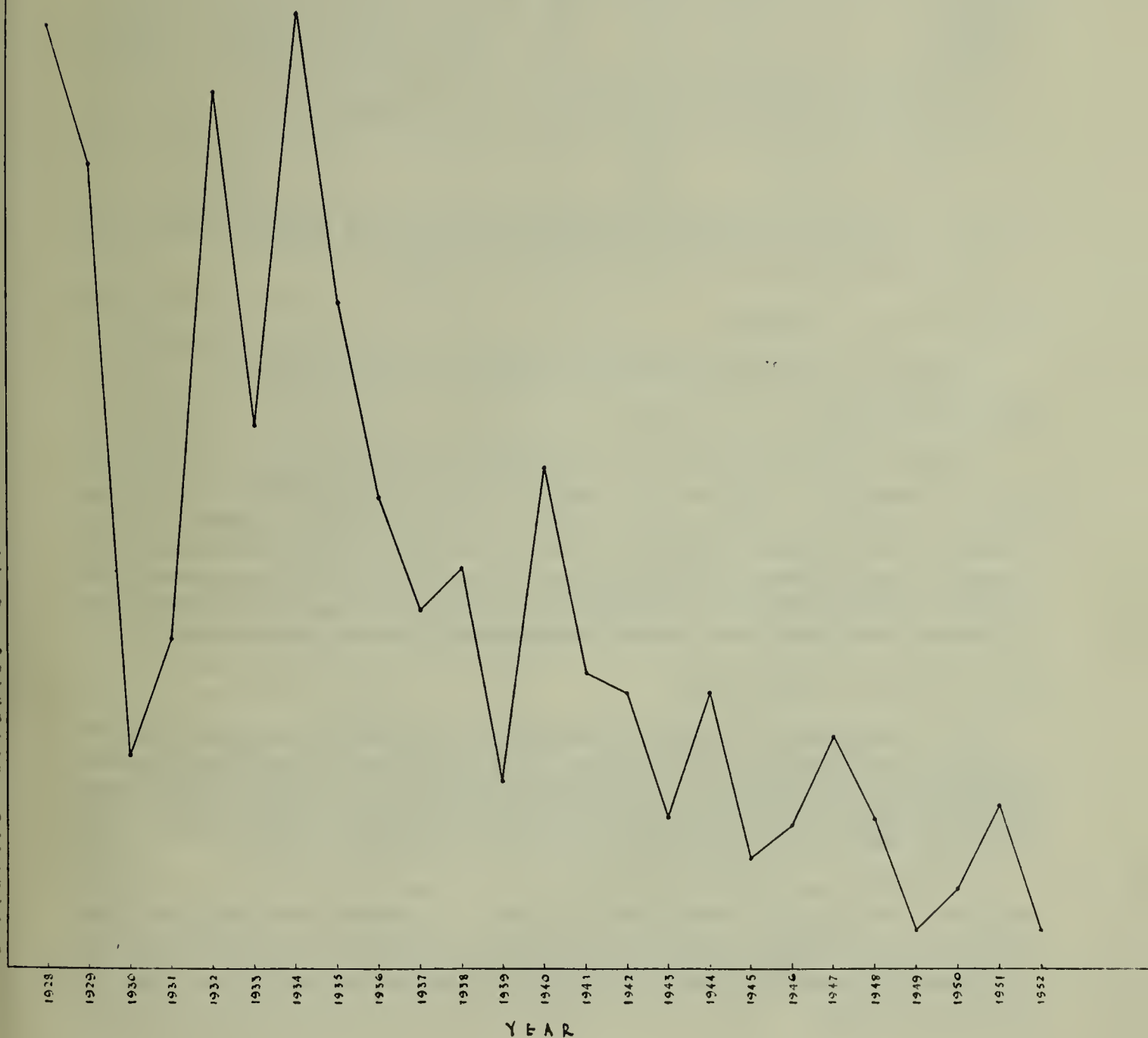
The cause of death was : Asphyxia due to Retropharyngeal haematoma in the course of Toxaemia of Pregnancy.

The death occurred after removal to a maternity home outside the County area.

The death rate per thousand live and stillbirths was 0.24.

The rate for England and Wales was 0.72 per thousand live and stillbirths.

MATERNAL MORTALITY RATES  
FOR NORTHAMPTONSHIRE  
FOR LAST 25 YEARS —



(v) ANTENATAL CLINICS.

There were twelve clinics at the end of the year, and sessions were held thrice weekly at Kettering, twice weekly at Corby and Wellingborough, weekly at Northampton and Rushden, twice monthly at Daventry, and monthly at Brackley, Irthlingborough, Long Buckby, Rothwell, Thrapston and Towcester.

TABLE OF ANTENATAL CLINICS

Clinic	No. of Sessions	Attendances				No. of talks	Average attendances	
		Primary	Subse-quent	Post-natal	Total		Per case	Per session
Brackley ... ..	12	53	53	7	113	9	2.1	9.4
Corby ... ..	100	211	1218	110	1539	94	7.3	15.4
Daventry ... ..	24	53	195	45	293	20	5.5	12.2
Irthlingborough ... ..	12	34	100	12	146	8	4.3	12.2
Kettering ... ..	131	467	2964	149	3580	82	7.7	27.3
Long Buckby ... ..	12	35	56	11	102	12	2.9	8.5
Northampton ... ..	52	244	797	107	1148	43	4.7	22.1
Oundle * ... ..	5	9	12	1	22	4	2.4	4.4
Rothwell ... ..	12	50	157	22	229	12	4.6	19.1
Rushden ... ..	52	133	728	91	952	42	7.2	18.3
Thrapston ... ..	12	45	148	6	199	11	4.4	16.4
Towcester ... ..	12	63	88	20	171	10	2.7	14.3
Wellingborough ... ..	100	227	1182	128	1537	84	6.8	15.4
Total ... ..	536	1624	7698	709	10031	431		

\* Closed 15th May, 1952.

ANALYSIS OF RETURNS AS BETWEEN MIDWIFERY, MATERNITY AND HOSPITAL BOOKED CASES.

This information is given on page 14, in the Survey Report.

(vi) POSTNATAL ATTENDANCES.

A total of 709 postnatal attendances were made at the antenatal clinics.

(vii) BLOOD TESTS.

Of 1,044 specimens examined for the Wassermann and Kahn reactions, two were found to show abnormalities. These cases were referred for advice and treatment to the appropriate clinics. In addition, specimens were examined by the National Blood Transfusion service at Oxford and the Pathological Department of Kettering and District General Hospital for determination of the Rh. Factor. Of 1,172 samples submitted, 308 or 26.3% were reported as Rh. negative ; 112 repeat samples were submitted at the request of the Regional Transfusion Officer. In addition to the above, 1,156 specimens were submitted for haemoglobin estimation.

(viii) MATERNITY ACCOMMODATION.

At the request of the Management Committees, the booking of cases on social grounds continued to be carried out by the Department. It is essential that the Local Health Authority should be able to select the cases to be admitted on account of social conditions as their officers are best acquainted with the domestic circumstances of each case. The arrangements between the Health Authority and the Management Committees have worked smoothly.

The Kettering and District Hospital Management Committee granted access to the maternity unit at Park Hospital, Wellingborough, to General Practitioners living within the “ area of access ” who applied for and received permission to attend their own patients in hospital.

Eighteen General Practitioners were granted these facilities, and from 1st July, 1952, 125 patients were admitted.



In each case, the need for admission on social grounds (i.e., unsuitable housing conditions or lack of home help) was confirmed by the District Nurse/Midwife and the booking was made through the Health Department. In addition, a number of cases was admitted from outside “ the area of access ”.

The numbers of cases booked each month were :

Northampton and District Hospital Management Committee—	
Barratt Maternity Home and St. Edmund's Hospital .....	32
Kettering and District Hospital Management Committee—	
Park Hospital, Wellingborough :	
Patients attended by own doctor .....	25
Others (i.e., cases from outside “ area of access ”) .....	10
	—— 35
St. Mary's Hospital, Kettering .....	30

The 327 cases referred to the Consultants for admission on social grounds to the Barratt Maternity Home or St. Edmund's Hospital remained under supervision at the County Antenatal Clinics.

St. Edmund's Hospital Maternity Unit became a “ General Practitioner Access Unit ” for Northampton County Borough patients only.

The following table shows the extent to which women were confined in Nursing Homes, Maternity Wards and in their own homes.

<i>Where confined</i>	<i>Number of Births</i>	<i>Percentage of Total</i>
Nursing Homes* .....	264	6.5
Maternity Wards*.....	2,141	52.5
At home .....	1,675	41.0

\* Including Nursing Homes and Maternity Wards outside the County Area.

(ix) MATERNITY AND NURSING HOMES.

The homes on the register at the time of reporting were :

- 1. “ Woodfield ” Nursing Home, 36, Wellingborough Road, Finedon (*Maternity and Medical*).
- 2. “ Hall Hill ” Nursing Home, 27, Church Street, Brigstock (*Maternity and Convalescent*).
- 3. “ Sunnyside ” Nursing Home, 24, Commercial Road, Kettering (*Maternity only*).

The total number of beds provided is 20.

(x) CARE OF UNMARRIED MOTHERS.

The County Council guaranteed payment for each approved case admitted to St. Saviour's Diocesan Maternity Home, Northampton, and similar homes. The girls were asked to pay 31/- per week whilst receiving maternity allowance and 21/- when in receipt of National Assistance, the balance being paid by the Health Committee. Any payment from the putative father was deducted from the final account.

Thirty-three unmarried mothers were admitted under the above arrangements.

A close liaison between the Peterborough Diocesan Council of Moral Welfare, the Kettering Social Welfare League, and the Health Department has been maintained. The Council was given a grant of £250 and the League £150 for work undertaken by them on behalf of the County Council.

(xi) CONTRACEPTION CLINICS.

Fifty-six County cases attended the Northampton Women's Welfare Association Clinic and 182 cases attended the Kettering Clinic administered by the County Council. At the latter, there were 24 sessions with a total of 519 attendances.



## B. Care of Children.

### (xii) CHILD WELFARE CENTRES.

There were 46 Child Welfare Centres in the County. The table on page 23 shows details of the activities carried out at each Centre.

The number of children under one year who attended for the first time was 2,361, representing 58.9 per cent of the total registered live births.

The total number of attendances at all child welfare centres by children under one year of age was 22,977, and by children between the ages of one year and five years 17,595, shewing a total increase of 2,656 on the numbers for 1951.

The number of child welfare sessions per 1,000 population under five years of age was 46.

In order that the child welfare centres may serve the widest possible areas, facilities were provided, free of charge, for mothers and children under five years of age to be conveyed by special buses to a number of centres. Details of the itineraries and numbers carried are shewn in the following table.

<i>Centre</i>	<i>Itinerary</i>	<i>No. of Journeys</i>	<i>No. of Mothers</i>	<i>No. of Children</i>	<i>Average No. of Passengers (i.e., Mothers and Children)</i>
Boughton ... ..	White Hills and Pitsford ...	11	281	336	56
Brackley ... ..	Kings Sutton, Charlton, Croughton, Aynho ... ..	11	163	241	37
	Syresham (Car) ... ..	9	16	19	4
Brixworth ... ..	Scaldwell, Draughton, Maidwell, (From 18/1/52)	11	149	192	31
Corby ... ..	Lamport, Hanging Houghton				
	Cottingham, Wilbarston, Ashley, Stoke Albany, Carlton, Middleton, Dingley, East Carlton, Rockingham, Brampton Ash, Sutton Bassett, Weston by Welland ... ..	11	118	149	24
Daventry ... ..	Braunston ... ..	11	125	183	28
Hackleton ... ..	Cogenhoe, Great and Little Houghton, Hardingstone, Wootton ... ..	11	157	189	31
Kettering ... ..	Stamford Road Estate ...	11	77	101	15
Kislingbury ... ..	Harpole, Upper and Lower Heyford, Bugbrooke... ..	11	215	267	44
Potterspury ... ..	Wicken, Deanshanger, Old Stratford, Cosgrove, Yardley Gobion ... ..	11	262	339	55
Roade ... ..	Blisworth, Shutlanger, Stoke Bruerne, Ashton, Hartwell ...	11	194	238	39
Silverstone ... ..	Paulerspury, Whittlebury ...	11	192	273	42
Spratton ... ..	Church and Chapel Brampton, Guilsborough, Hollowell, Creaton ... ..	11	116	144	24
Towcester ... ..	Greens Norton, Blakesley, Maidford, Litchborough, Grims-cote, Pattishall, Eastcote, Tiffield, Caldecote ... ..	11	154	174	30
Welford and Cold Ashby ... ..	East Farndon, Oxendon, Kelmarsh, Hazelbeach, Clipston, Sibbertoft, Marston Trussell, Naseby, Thornby, Sulby ...	22	385	553	43
West Haddon ... ..	Barby, Kilsby, Lilbourne, Yelvertoft, Crick ... ..	11	313	382	63
Woodford Halse ... ..	Boddington, Chipping Warden, Culworth, Eydon, Aston-le-Walls, Farndon, Byfield, Appletree ... ..	11	252	308	51
Yardley Hastings ... ..	Cogenhoe, Denton Aerodrome, Brafield, Denton, Castle Ashby	11	266	301	52
TOTAL ... ..		207	3435	4389	38

## CHILD WELFARE CENTRES.

NAME OF CENTRE.	AVERAGE NO.	AVERAGE NO. OF		NO. OF
	OF CHILDREN ATTENDING PER SESSION.	CONSULTATIONS PER DOCTOR'S ATTENDANCE.	ATTENDANCES BY DOCTOR.	
Boughton .....	41	14	11	11
Bozeat .....	25	13	11	11
Brackley .....	41	21	11	11
Brixworth .....	61	24	11	11
Broughton .....	20	17	10	11
Burton Latimer .....	53	15	11	22
Cold Ashby and Welford.....	56	22	11	11
Corby .....	56	22	48	99
Daventry .....	39	26	22	22
Desborough .....	40	20	11	21
Duston .....	28	21	22	22
Earls Barton .....	19	14	10	20
Finedon .....	42	27	11	11
Geddington .....	20	14	11	11
Gretton .....	22	15	10	10
Hackleton .....	30	22	11	11
Higham Ferrers .....	73	27	21	22
Irchester .....	30	18	11	22
Irthlingborough .....	42	22	22	22
Kettering (St. Phillip's) .....	16	15	11	11
Kettering (School Lane) .....	46	30	176	180
Kings Cliffe .....	19	18	10	10
Kislingbury .....	44	25	11	11
Long Buckby .....	38	24	11	11
Middleton Cheney .....	38	17	11	11
Moulton .....	43	17	11	11
Oundle .....	29	28	11	11
Potterspury .....	43	29	11	11
Raunds .....	36	28	11	11
Roade .....	47	26	11	11
Rothwell .....	34	18	11	22
Rushden.....	70	26	47	48
Silverstone .....	40	15	11	11
Spratton.....	32	16	11	11
Thrapston .....	25	25	11	11
Towcester .....	35	28	11	11
Weedon .....	19	13	10	11
Weldon .....	22	16	11	11
Wellingborough (Rock Street) .....	45	23	49	51
Wellingborough (St. Andrew's) .....	21	19	11	21
West Haddon .....	48	26	11	11
Weston Favell .....	32	14	11	22
Wollaston .....	22	14	11	22
Woodford .....	21	18	11	11
Woodford Halse .....	57	34	11	11
Yardley Hastings .....	65	29	11	11

## (xiii) ORTHOPAEDICS.

The Clinics organized by Manfield Orthopaedic Hospital continued their valuable work and 50 children under five years of age were referred to the clinics by the Medical Officers in charge of child welfare centres.

## (xiv) DENTAL CARE.

The Survey Report of Mr. Ian Faulds, Senior Dental Officer, was :—

*Expectant and Nursing Mothers.* Though no clinics are held solely for the dental examination and treatment of expectant and nursing mothers, all patients attending antenatal clinics are eligible for dental treatment. Any patient who shows need for dental treatment is referred to the County Dental Service for examination and treatment. Treatment, when necessary, is arranged by the dental officer at the end of the school children treatment session at the clinic nearest to the patient's home, though this unfortunately may be some miles away. Treatment includes fillings, extractions, etc., and the provision of artificial dentures. Many expectant mothers fail to keep their appointments and valuable time is lost. Wherever a reason is given for the failure another appointment is given. Where dental clinics are held at fixed centres several days a week, little difficulty is experienced in making further appointments, but in rural areas, if the date of confinement is near, the treatment cannot often be given till after the birth of the baby. This delay largely defeats the object of treatment but unless the staff can be increased it is unavoidable. Efforts have been made, but it seems impossible to get further full-time officers at present.

The Medical Inspection and Treatment Committee decided not to advertise for part-time officers until agreement was reached by the County Councils Association and the British Dental Association on the fees payable to officers employed on a sessional basis. It may be that private practitioners who would not be induced to treat school children would be prepared to offer their services on a part-time basis to the Local Authority for treatment of adults. Once the sessional fees are settled, the employment of part-time officers might, with advantage, be again explored. The possibility of employing part-time officers depends on the provision of clinics in which they can work. Furthermore, the need for continuity of treatment, so essential in school children, is less in the case of expectant and nursing mothers, many of whom require only dentures.

Under Section 2 of the National Health Service Act, 1952, it seems probable that the demand from local authorities for dental treatment for expectant and nursing mothers may increase in the future. The Act states that expectant mothers or mothers with a child under twelve months old are entitled to free dental treatment. This free treatment, however, when provided by a general dental practitioner, does not include the supply of dentures and though financial assistance may be obtained by necessitous patients from the National Assistance Board, many patients may prefer to attend the local authority clinics where all forms of dental treatment including dentures must be provided free.

*Wellingborough*—Provision has been made at the new clinic to equip the recovery room so that it can be used as an occasional surgery by a part-time officer if one is appointed. The surgery should be available during 1953.

*Corby*—At one stage, at least two dental clinics were included in the plans of the Diagnostic Health Centre being built by the Nuffield Provincial Hospital Trust and the Oxford Regional Hospital Board. The decision to omit the dental clinics is regrettable in view of the rapid growth of Corby. The existing Local Authority clinic includes only one dental surgery and there is no accommodation in which a part-time officer could work.

*Kettering*—An occasional surgery could be established in the stable block of the Stockburn Memorial Home if no room is available in the main block. A part-time officer could be employed here.

*Northampton*—The lack of a permanent clinic in Northampton makes treatment by a part-time officer impossible.



*Rushden*—The clinic in Griffith Street could be made available for a part-time officer.

*Children under School Age.* It is advantageous that these small patients should be seen by the dental surgeon who will be responsible for their treatment during their school life. Though it is not practicable at present to hold special inspection clinics in all parts of the County, in those few areas where a dental officer can attend the Welfare Centre the visit is much appreciated and all patients attending are examined. Many children attending Infant Welfare Centres are referred to a dental officer either on the request of the parent or for any defect obvious to the doctor or health visitor in charge of the clinic. Unfortunately many small patients with bad habits—such as thumb sucking, tongue thrusting or mouth breathing—are overlooked. These bad habits cause malformations of the teeth and jaws that may require years of treatment to correct at a later age. Often a few words of advice or the provision of a simple appliance at an early age can prevent needless treatment to the patients and cost to the Authority.

The advantage of early treatment of tooth decay should be by now well known, but it is distressing to find so many school entrants who have never been seen by a dentist and whose parents, in excuse for their neglect, state that they were waiting till the child “came to school so that he could be seen by the School Dentist”.

The apportionment of the dental officers' time between the ‘priority classes’, expectant and nursing mothers, children under school age and school children is a task worthy of the judgment of Solomon and however apportioned must under present conditions be inadequate. Though fewer children under school age were seen this year, more extractions were necessary. This seems to bear out the impression of dental officers that the incidence of decay in young children is increasing. The tragedy is that our powers to combat it decrease.

The repercussions of the National Health Service on the dental services provided by Local Authorities are well known. Before the war, the County had a staff of seven dental surgeons. In the ordinary course of events, this establishment would have grown with the increased child population. A number of the dental staff resigned to seek higher remuneration and the Authority now has a staff of one senior dental officer and four dental officers. The efficiency of the School Dental Service has been seriously impaired and with it has suffered the dental services for mothers and young children.

An interesting field of co-operation between the Consultant Ear, Nose and Throat Surgeons and the Dental Officers has been found in the treatment of children who are mouth breathers. The Throat Surgeons refer a number of these cases to the Dental Officers for treatment by oral screens because closure of the mouth is a prerequisite to treatment of an unhealthy condition of the back of the throat. The Dental Officers have taken a special interest in the provision of oral screens in these cases.

**TABLE II.**

**1952**

**(a) Numbers provided with dental care :**

	<i>Examined</i>	<i>Needing Treatment</i>	<i>Treated</i>	<i>Made Dentally Fit</i>
Expectant and Nursing Mothers ...	185	179	162	81
Children under five ... ..	641	470	440	407

**(b) Forms of dental treatment provided :**

	<i>Ex- trac- tions</i>	<i>Anaesthetics</i>		<i>Fill- ings</i>	<i>Scalings or scaling and gum treatment</i>	<i>Silver Nitrate treatment</i>	<i>Dres- sings</i>	<i>Radio- graphs</i>	<i>Dentures provided</i>	
		<i>Local</i>	<i>General</i>						<i>Complete</i>	<i>Partial</i>
Expectant and Nursing Mothers	492	31	120	106	72	10	42	4	26	27
Children under five	788	11	335	45	—	320	1	—	—	—

## (xv) DEFECTIVE VISION.

One hundred children under five years of age were referred for examination by the Ophthalmic Consultants of the Hospital Board.

## (xvi) CARE OF ILLEGITIMATE CHILDREN (MINISTRY OF HEALTH CIRCULAR 2866).

Of the 180 illegitimate births in the County, 121 cases were brought to the notice of the Moral and Social Welfare Workers.

The following table shows details of the cases.

1. Total number of cases brought to the knowledge of the Moral and Social Welfare Workers .....	121
2. <i>Source of Reference :</i>	
1. Medical Practitioners .....	23
2. Health Visitors .....	16
3. District Midwives and Nurses (including cases referred by C.M.O.H.) .....	30
4. Private individuals, etc. ....	52
3. <i>Classification :</i>	
1st illegitimate .....	94
2nd illegitimate.....	4
3rd illegitimate .....	6
" Illegitimate " of married women .....	17
4. <i>Ages of Mothers :</i>	
15 years .....	4
16-21 years .....	49
21-25 years .....	33
25-30 years .....	21
30+ years .....	14
5. <i>Confinement Arrangements :</i>	
1. Park Hospital, Wellingborough .....	6
2. St. Mary's Hospital, Kettering. ....	20
3. The Gables, Peterborough .....	5
4. Neithrop Hospital, Banbury .....	3
5. Horton General Hospital, Banbury .....	1
6. Barratt Maternity Home .....	9
7. St. Edmund's Hospital, Northampton .....	8
8. Moral Welfare Homes .....	46
9. Other Homes and Hostels .....	—
10. At Home .....	12
11. Arrangements not completed .....	11
6. <i>Final arrangements made for Babies' Welfare</i> at age of 6 months so far as can be ascertained, including incomplete cases brought forward from last year (1st July, 1951—30th June, 1952)—	
Remaining with mother .....	41
Remaining with mother and grandmother .....	31
Adopted .....	23
Pending adoption .....	—
Mother and child left area .....	8
Admitted to voluntary homes .....	6
Boarded-out .....	11



### 7. *Financial Arrangements :*

Grants from Voluntary Associations .....	15
Affiliation Orders .....	9
Voluntary payments.....	28
Assisted by Local Health Authority .....	33

8. Babies died within one year of birth .....	8
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### (xvii) PROBLEM FAMILIES.

There are some 155 problem families known to the Department. These are kept under constant supervision by the Health Visitors.

### (xviii) DAY NURSERIES.

The Nurseries at Corby, Kettering and Rushden were closed at the end of April.

### (xix) NURSERIES AND CHILD-MINDERS REGULATION ACT, 1948.

At the time of reporting the premises registered under the above Act were :

- “ Oakroyd ” Day Nursery, Finedon Road, Wellingborough (18 places).
- “ Willow Edge,” Barby (9.places).

### (xx) DAILY MINDERS.

When the Health Committee decided to recommend the closing of the Day Nurseries, they made an amendment to the proposals under Section 22, whereby mothers could be assisted in paying daily minders. The amendment states “ The Council will arrange for daily boarding-out with foster mothers of children of mothers who are unsupported (for example unmarried, widowed, divorced or separated) and must necessarily go out to work to maintain the home and cannot make other suitable arrangements for their children’s care by day, or who are unable to look after their families by reason of illness or confinement ”.

Mothers who qualify for assistance under this scheme are helped in finding a suitable minder, and a grant is made towards the cost, if it is considered that they cannot afford the reasonable charges of the daily minder.

The mothers of three children were assisted during 1952.

### (xxi) PROVISION OF PREMISES.

Work on the construction of the new Health Clinic at Wellingborough proceeded throughout the year.

## MIDWIFERY (SECTION 23)

The Survey Report was :—

### **Domiciliary Midwifery.**

The Local Health Authority provides an efficient domiciliary midwifery service which covers the whole County. The staff is under the immediate supervision of the Superintendent Nursing Officer who is also non-medical Supervisor of Midwives. She is helped by four Assistant Superintendent Nursing Officers. At the present time, the staff consists of 76 nurse/midwives. The approved establishment is 89 full-time nurse/midwives and 13 part-time nurse/midwives. Prior to 1948, the County Nursing Association had carried out some re-organization of the District Nursing Associations and accordingly, since that time, there have been few changes in the boundaries of the nursing/midwifery districts. The need, however, to revise and change the districts to meet altered circumstances and changes in population, is realized. There has, however, been re-organization in some districts consequent upon the appointment of four nurse/midwife/health visitors to work in the rural areas.

The supervision of the midwives is carried out by the non-medical Supervisor and her Assistants. Each midwife is inspected quarterly. At one visit, she is accompanied on a full morning's work which usually includes visits to expectant mothers and to post-natal cases. At these inspections, the midwife's books, bags and equipment are seen. The next quarterly visit is spent in the afternoon when again books, bags and equipment are checked over and difficulties discussed. The technique of domiciliary supervision of midwives does not seem to have altered for many years and it is at least open to question whether a reconsideration of the methods of inspection is not overdue. The non-medical Supervisor and her Assistants also visit midwives in connection with cases of puerperal pyrexia, eye infections, premature babies and so on. Independent midwives, of whom there are seven, are inspected in accordance with the same methods as are applied to the Authority's staff.

#### *Administration of Analgesia.*

All midwives are trained in the use of gas and air analgesia and 58 machines have been provided. Shortly after the domiciliary midwifery service was taken over by the County Council, it was realized that while many machines had been provided and many midwives had been trained, the number of mothers who received analgesia seemed to be disappointingly low. Accordingly, since November, 1948, a return has been submitted every quarter to the appropriate Sub-Committee of the Health Committee giving for each nursing district the number of midwifery and number of maternity cases attended by each midwife and the number of mothers who have received gas and air analgesia. The percentage throughout the County of midwifery patients who have received analgesia is reported and the Committee is also informed of the reasons why, in each case, women have not received gas and air analgesia. Largely as a result of these measures, the proportion of women who receive gas and air analgesia has grown from 42% in 1948 to 76% in 1952.

Table III. (page 29) gives an analysis of the reasons why gas and air was not administered in midwifery cases over the period October, 1948 to December, 1952.

From the analysis, it is clear that there are many good and valid reasons why gas and air is not administered in a substantial number of cases. To begin with, the doctor in charge of the case must give a medical certificate, and in 65 cases the patient was not medically fit. Again, some patients are not co-operative and do not ask their doctor for a certificate. Other patients simply refuse to have gas and air. The largest group is accounted for by the cases in which there was insufficient time to give gas and air analgesia. This group is likely to be larger in a country area than in an urban area because the midwife must inevitably take rather longer to get to her patients. The number in this group does seem large but all the midwives in the rural areas have cars and indeed some of the midwives in the urban districts also have cars. The reduction from 1949 to 1952 in the percentage of midwifery patients who do not receive gas and air analgesia will be noted in Column 11.



TABLE III.

Analysis of reasons why Gas and Air was not administered in midwifery cases  
over the period October, 1948, to December, 1952

	Patient Medically Unfit	Patient Refused	Patient had not obtained Medical Certificate	Patient delivered before arrival of midwife—emergency or quick labour	Midwife untrained in Gas and Air	Machine temporarily not available	Other reasons—e.g. premature birth or patient given general anaesthetic by doctor	Total No. of cases where Gas and Air was not administered	Total No. of cases where Gas and Air was administered	Percentage midwifery cases in which Gas and Air was not administered
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
<i>Qtr. ended :</i>										
*Dec. 48 ...	4	16	21	24	—	—	—	65	87	43
Mar. 49 ...	5	24	12	33	10	—	—	84	82	51
June 49 ...	7	26	20	18	32	4	—	107	119	47
Sept. 49 ...	5	30	5	24	13	3	—	80	115	41
Dec. 49 ...	7	27	6	26	3	—	—	69	116	37
Mar. 50 ...	7	15	7	24	6	3	5	67	108	38
June 50 ...	4	20	9	17	8	5	1	64	132	33
Sept. 50 ...	7	13	2	30	8	3	—	63	154	29
Dec. 50 ...	2	10	4	18	4	4	1	43	132	25
Mar. 51 ...	3	13	9	39	3	2	3	72	114	39
June 51 ...	1	14	1	16	—	3	—	35	167	17
Sept. 51 ...	—	10	4	27	2	1	2	46	140	25
Dec. 51 ...	2	9	5	22	2	5	1	46	112	30
Mar. 52 ...	—	13	4	23	4	3	3	50	148	25
June 52 ...	1	16	4	18	3	2	—	41	149	23
Sept. 52 ...	7	16	4	25	1	5	—	58	166	26
Dec. 52 ...	3	15	—	20	—	5	—	43	162	21
	65	287	117	404	99	48	16	1036	2203	

Total number of midwifery cases where Gas and Air was not administered ... 1036

Total number of midwifery cases where Gas and Air was administered ... 2203

Percentage of total midwifery cases in which Gas and Air was administered ... 68%

\* When the enquiry was first instituted incomplete reports were obtained.

When the Central Midwives Board approved of the use of pethidine by midwives who had been properly instructed, the County Medical Officer of Health asked Mr. F. F. Waddy, the Consultant Anaesthetist at Northampton General Hospital, to give a lecture on the subject. Mr. Waddy's notes were circulated to the staff and in due course every member received an oral examination from the Superintendent Nursing Officer or one of her Assistants. A certificate of approval was issued to each midwife who satisfied the Superintendent Nursing Officer that she was fully conversant with the use of the drug.

As mentioned earlier, the midwives bring many of their patients to the antenatal clinics. Between clinic sessions, however, expectant mothers are visited in their own homes by the midwives. Moreover, in those parts of the County which cannot conveniently be served by antenatal clinics, the midwives are entirely responsible for antenatal supervision. Some general practitioners arrange with the domiciliary midwives to meet them in the mothers' homes so that they can pay antenatal visits at the same time. Throughout the County, the co-operation between general medical practitioners and midwives is excellent.

Midwives are sent to Post Graduate Courses every five years.

Part II. Midwifery Training—Arrangements have been made with the Kettering and District Hospital Management Committee to afford three months Part II. training on the District. The pupils reside at Corby, Kettering and Wellingborough with the district midwives who have been approved for this purpose by the Central Midwives Board. The scheme will permit an intake of 20 pupils per annum, but at the time of writing, only one pupil is in training.

The arrangements for selecting women whose confinement in hospital is recommended on social grounds are described on page 14.

The effect of the National Health Service on the domiciliary midwifery service has been twofold. First of all, an increasing proportion of mothers has been admitted to hospital for confinement. The following table shows the extent to which this has taken place over the last four years :

TABLE IV.

Year	Number of Births			Percentage Domiciliary Births
	In Hospitals	In Nursing Homes	At Home	
1949    ...    ...	1,944		2,117	52.1
1950    ...    ...	1,863	273	1,942	47.6
1951    ...    ...	2,001	264	1,730	43.3
1952    ...    ...	2,141	264	1,675	41.0

The second effect has arisen from the maternity medical services scheme under which practically all mothers who intend being confined at home book a doctor to look after them. Some of the general medical practitioners insist on the midwife summoning them so that they can be present to conduct the delivery. Other practitioners leave the midwife to conduct the delivery on the understanding that they are summoned if necessary.

Supplementary information usually included in the Annual Report is :—

(i) MIDWIFERY AND MATERNITY SERVICES.

The following table shows the numbers of cases attended by midwives (employed by the former County Nursing Association or by the County Council) from 1939 :—

DOMICILIARY CONFINEMENTS

*Attended by Midwives (County Nursing Assn., or County Council)*

Year	As Midwives		As Maternity Nurses		Total
	No.	Per cent.	No.	Per cent.	
1939	1149	53	1036	47	2185
1940	1165	53	1040	47	2205
1941	1220	55	998	45	2218
1942	1260	51	1209	49	2469
1943	1094	45	1330	55	2424
1944	1165	44	1505	56	2670
1945	1052	47	1204	53	2256
1946	1074	44	1364	56	2438
1947	1207	43	1620	57	2827
1948	963	42	1349	58	2312
1949	772	39	1216	61	1988
1950	765	41	1097	59	1862
1951	732	44	949	56	1681
1952	820	48	836	52	1656



## (ii) MIDWIVES.

The non-Medical Supervisor of Midwives (Superintendent Nursing Officer) and her staff, made 320 routine visits.

The number of midwives who notified their intention to practise in the area at any time during the year was 140 and on December 31st, 120 remained in practice. Of the latter, 82 were employed by the Council (including relief midwives), 27 by Hospital Management Committees, 4 in private nursing homes and 7 in private practice. Six midwives notified their intention to act as maternity nurses (including 4 who acted only temporarily in the area).

The Local Health Authority's midwives spent 1,090 nights on duty.

## (iii) MEDICAL AID.

Medical aid was requested in 194 cases and 65 claims for payment of fees were dealt with from medical practitioners whose assistance had been sought, as against 114 notifications and 85 claims in the previous year.

## (iv) GAS AND AIR ANALGESIA.

The number of midwives employed by the Authority who were qualified to administer gas and air analgesia was 73, and 58 machines were provided. Of a total of 1,656 midwifery and maternity cases, 625 midwifery (76.2%) and 468 maternity cases received analgesia. One of the midwives in private practice was qualified to administer gas and air analgesia.

## (v) MATERNITY OUTFITS.

Maternity Outfits were available free of charge for all women confined at home or in private nursing homes. The outfits contain the dressings needed at the confinement and during the lying-in period. 1,984 outfits were purchased at a cost of £1,116/7/10.

## (vi) PETHIDINE.

Fifty-seven midwives were authorized to use pethidine. The drug was administered in 194 midwifery cases and to 150 patients attended by maternity nurses.

## (vii) CARS FOR DISTRICT NURSE/MIDWIVES.

There was no change in the establishment of cars approved for the Home Nursing and Midwifery Service, which is as follows :—

Superintendent Nursing Officer and three Assistant Superintendent Nursing Officers .....	4
District Nurse/Midwives .....	63
Relief Nurse/Midwives .....	2
Relief Cars .....	2
	<hr/>
	71
	<hr/>
The position at 31st December, was	
Number of cars	
(a) provided by the County Council .....	42
(b) on loan from County and District Nursing Associations	14
(c) owned privately .....	15
	<hr/>
TOTAL .....	71
	<hr/>

Under the Council's policy for replacement of old cars, three new 8 h.p. saloons were delivered. All provided cars are serviced regularly by the County Fire Brigade staff.

**HEALTH VISITING (SECTION 24)**

The Survey Report was :—

The County is divided into 31 areas for purposes of health visiting. In her area, the health visitor is responsible for visiting all children from two weeks of age to five years of age. When

she visits children, the health visitor often finds that there are other health matters affecting other members of the family on which she is called to give advice. The health visitors also visit all notified cases of tuberculosis and their contacts to advise on the prevention of infection, to give health teaching in the home and to report on home conditions and possible sources of infection to the County Medical Officer of Health. The health visitors also visit all mental defectives including those under voluntary supervision in their areas and submit quarterly reports to the County Health Department. The mental defectives allocated to the health visitors, for the most part, include those who are in fairly good homes and are stable.

At the child welfare centres, the health visitors play an important role. They are responsible for the smooth running of the clinic, for seeing that the premises and equipment are prepared, for co-operation with the voluntary committee and for selecting the children who are due to be examined by the doctor. They are able to give the doctor a picture of the home circumstances and receive advice regarding subsequent follow-up visits.

In addition, the health visitors, acting in the capacity of school nurses, visit schools every term to carry out cleanliness inspections and at these inspections there is a general screening of the health of the children and also health teaching. Prior to the visit of the School Medical Officer for routine inspections, the health visitor calls at the school to weigh and measure pupils and to test the vision. She is, of course, present with the doctor at routine inspections and she pays follow-up visits to the homes in special cases.

There are a few minor ailment clinics in the County but very little time is spent on this type of work. The health visitors are also in charge of three ultra-violet light clinics.

The three chest clinics in the County, namely at Kettering, Wellingborough and Northampton, are staffed by seven of the health visitors who attend on a rota when their own patients are visiting the clinic. In addition, the health visitors from the other areas can always attend the clinic to discuss with the chest physician any case on which they desire advice. The health visitors are sometimes asked to read tuberculin skin tests for the chest physician. There is, undoubtedly, close co-operation between the health visitors and the consultant chest physician by virtue of the fact that he was a former tuberculosis officer on the staff of the Health Department.

The health visitors co-operate with the Hospital Almoners in paying special visits to report on home circumstances for the consultants. Where indicated, also, the health visitors receive appropriate medical information regarding the cases under their care.

The health visitors endeavour to seek the co-operation of the general medical practitioners ; they endeavour to get to know the doctors working in their areas as they sometimes meet them on their rounds. Many of the health visitors are able to consult the medical practitioners over difficult cases.

From my meeting with the general medical practitioners in the County, I am, however, bound to confess that the attitude of the doctors is sometimes less favourable to the health visitors than to the district nurses. The reason for this is, I am sure, largely due to misunderstanding. The health visitors advise on matters which are not brought to the notice of the doctors. Sometimes parents report in garbled terms the advice of the health visitor to the family doctor, in order, so to speak, to seek a second opinion. Where the local doctor has been able to meet the health visitor and to appreciate the scope of her work and her duties and the means by which she can assist him in his practice, there has generally been full co-operation.

The Health Committee has adopted the policy that in rural areas, health visiting duties will be combined with home nursing and district midwifery and in pursuance of this policy four district nurse/midwife/health visitors have been appointed. The population served by these health visitors is estimated to be on an average 2,200. The advantage of the "generalized" system, as it is known, is that the midwife, as she has very often brought the baby into the world, starts off with a great advantage when she takes over health visiting. Moreover, she is also in a position to carry out health teaching in the homes where there are aged and infirm. In view of the traditionally good relations which have existed between general medical practitioners and district nurses, better co-operation is secured.



The work is supervised by an Assistant Superintendent Nursing Officer who has no other duties. Not only does she supervise the health visitors, but she takes a keen interest in health education, particularly at the welfare centres.

As in other social services, there has been great difficulty in recruiting the necessary staff. Whether Local Health Authorities in common with other employing bodies such as hospital committees and education authorities have set themselves standards of staffing which cannot be achieved because the available woman power is not adequate, is a subject which calls for careful consideration. At the present time, the Authority has five vacancies and the existing staff have case loads which on present day standards are excessive. Some of the health visitors have case loads of 900 children which include children under five, tuberculosis patients and mental defectives. In addition to this load, they are responsible, as a rule, for something like 1,000 school children. On account of lack of staff, the health visitors have not been able to extend their work to include advice on health and prevention of infection to all kinds of families.

A great amount of the time of the health visitors is spent on problem families. These families are visited regularly, reports submitted and consultations are held with the Children's Department, the N.S.P.C.C., the District Medical Officers of Health and the Local Sanitary Inspectors. Most of the work with problem families is disheartening and disappointing. I am, however, confident that health visitors have played a substantial part in social medicine by so advising many young women that they have been prevented from deteriorating into sub-standard social levels. Even among the problem families themselves, conditions, bad as they are, would often be even worse were it not for the unremitting work of the health visitors. To save people who often seem to have no desire to be saved against themselves is the hopeless task presented by every problem family. A register of problem families is kept and at the present time it holds the names and addresses of 155 families.

**Scholarship Schemes.** The Committee has approved a scheme under which suitable candidates can obtain training as health visitors. During training, approved candidates receive a salary of £315 p.a. and on completion of training, are under contract if required to work in the County for two years. Some of the candidates who have been district nurse/midwives on the County staff have returned after training to undertake "generalized" duties. There is no candidate in training at present.

For many years, the Committee has sent health visitors to post-graduate courses every five years. At quarterly staff meetings which are attended by the health visitors and by the district nurse/midwives, addresses on subjects of common interest are given by hospital consultants.

The health visitors carry out home visits and make reports in connection with certain social surveys which have been recently carried out, notably the Survey of the Joint Committee of the Institute of Child Health (University of London), the Society of Medical Officers of Health and the Population Investigation Committee, and also the Infant Health Survey carried out in co-operation with the Institute of Social Medicine at Oxford.

**Health Education.** The policy of the Department has been, for the most part, to rely on the work done by health visitors in their contact with the public. After all, the health visitors are primarily home teachers. At the child welfare centres, the health visitors arrange demonstrations, group talks, films and, of course, talks with individual mothers. Use is made of posters and leaflets and recently particular prominence has been given to the urgent need for fireguards and the protection of electric fires. A special educational drive has been made to reduce home accidents. On occasion, at the welfare centres the health visitors have organized health exhibitions which have attracted a considerable amount of attention.

The health visitors also carry out health education in schools by talking to individual children at cleanliness surveys and on occasion, at the head teacher's request, talks on general hygiene and parentcraft are given to classes of children.

Members of the Medical Staff, the Senior Nursing Staff and the health visitors are frequently invited to give talks to Parent/Teachers' Associations, Rotary Clubs, Women's Institutes, Townswomen's Guilds and other organizations of this kind. These talks to what have been called 'ready made audiences' provide a good opportunity for health education. Such talks



are sometimes criticized on the grounds that one is preaching to the converted, but this is not so as frequently the need for instruction and clarification of ideas is proved in the discussion that follows the lecture.

My view would be that as regards health education, one must rely on the health visitor who carries the gospel of health teaching into the homes of the people and into homes where it would not otherwise be received. When a new campaign, such as the need for diphtheria immunization, is begun, wide-spread publicity in the press and in the women's journals coupled with talks in the home by the health visitors represent the most effective methods of approach. Health exhibitions and special days involve a great amount of time to arrange and it might be doubted whether the increased knowledge which thereby results is worthwhile and whether the time of the health visitors would have been better spent in their home teaching.

Copies of the leaflets used are :—

**A**

**NORTHAMPTONSHIRE COUNTY COUNCIL  
Health Department**

No. H.V.5.

*County Medical Officer of Health :*  
C. M. SMITH, M.D.

County Offices,  
Guildhall Road,  
Northampton.

Dear Madam,

It has been reported to me by my Health Visitor that you have not provided a fire guard for the protection of your child.....age.....

I have to point out that this is an offence under the Children and Young Persons Act 1933, in Section 11, of which it is stated :

“ If any person who has attained the age of sixteen years, having the custody, charge or care of any child under the age of seven years, allows the child to be in any room containing an open fire grate not sufficiently protected to guard against the risk of his being burnt or scalded without taking reasonable precautions against that risk and by reason thereof the child is killed or suffers serious injury, he shall on summary conviction be liable to a fine not exceeding ten pounds. . . .”

A large number of children die every year as the result of burning accidents in the home, many of which are due to lack of fire guards. I trust that having drawn this matter to your attention you will at once provide a fire guard.

Yours faithfully,

County Medical Officer of Health

**B**

**NORTHAMPTONSHIRE COUNTY COUNCIL  
Health Department**

No. H.V.4.

County Offices,  
Guildhall Road,  
Northampton.

Dear Madam,

It has been reported to me by my Health Visitor that your child.....age..... has not been provided with a cot but sleeps in the same bed as an adult person.

I have to draw your attention to the danger of this practice as instances have occurred where a child sleeping with an adult or adults have been “ overlaid ” and died from suffocation. In certain circumstances where an infant under three years of age is involved an offence can be caused under the Children and Young Persons Act 1933.

I shall be glad to receive your co-operation and hope to learn from my Health Visitor after her next visit that you have been able to provide separate sleeping accommodation for your child.

Yours faithfully,

County Medical Officer of Health

Supplementary information usually included in the Annual Report is :—

(i) STAFF.

The staff consisted of an Assistant Superintendent Nursing Officer, 26 whole-time, 2 part-time Health Visitors and 6 Health Visitor/District Nurse-Midwives.

## (ii) VISITS.

Details of visits carried out are :

1. Antenatal .....	533
2. Children under 1 year .....	36,524
3. Children 1-5 years .....	43,074
4. Tuberculosis cases .....	3,103
5. Mental Defectives .....	839
6. Scabies .....	18
7. Infectious Disease cases .....	256
8. Other Visits .....	2,564
	<hr/>
	86,911
	<hr/>

In addition, the Health Visitors made 1,273 attendances at child welfare centres and gave 189 lectures to mothers ; 324 attendances at antenatal clinics ; 85 attendances at U.V.R. clinics ; 323 attendances at chest clinics ; 119 attendances at diphtheria immunization clinics and 50 attendances at birth control clinics.

A total of 3,854 first visits was made to children under one year.

## (iii) MENTAL DEFICIENCY.

The Health Visitors pay routine visits to mental defectives who are living in satisfactory homes and whose conduct is not markedly anti-social. Other defectives who require special supervision are visited by the Mental Welfare Officers.

**HOME NURSING (SECTION 25)**

The Survey Report was :—

All the home nurses, except five, are also trained midwives. The supervision of the service is under the immediate control of the Superintendent Nursing Officer who has four Assistants, two of whom are stationed in Northampton, one at Kettering and one at Wellingborough. All district nurses are inspected by the supervisory staff at quarterly intervals. The district nurses are, of course, resident in the areas they serve and in many instances they occupy houses either provided by the County Council or rented from the Local Housing Authority. The action of many of the County District Councils in the County in letting houses to the Local Health Authority for occupation by the district nurses is greatly appreciated.

The County Council has erected one house at Clipston which is now occupied and a second house is under construction at Rothwell. Recently, April, 1953, a Rural District Council has sold to the County Council a house included in one of their estates which, in consultation with the Health Committee, was slightly altered to make it suitable for the district nursing service by the provision of a district room. All the nurses' houses are served by telephones and all the nurses who work in rural areas have motor cars. In point of fact, 71 cars are available of which 15 are owned by the district nurses and 56 are provided by the County Council. Since the service was taken over four garages have been erected near the district nurses' houses.

There is again very close co-operation with the general medical practitioners who make full use of the district nurses. There is also good co-operation with the hospitals and details of treatment of patients being discharged are notified daily by telephone to the office of the Superintendent Nursing Officer in order that an early follow-up visit can be paid by the district nurse. The Hospital Almoners and the district nurses work in close harmony to ensure an early recovery of the patient. The main type of case attended by the home nurse is the chronic, elderly case. Figures cannot be submitted because the Nurses have not been asked to supply them but a few mornings spent with the district nurses on their rounds soon reveals a picture of the extent to which the day to day work of the district nurse is occupied with attendance on cases of hemiplegia, chronic arthritis, cardio-respiratory failure and debility due to advanced years. There are many old people in poor health to whom the visit of the district nurse is the one welcome break in a lonely day.



As previously mentioned in Section 2 (b), there is also a growing demand by general practitioners for the district nurse to carry out injections of insulin to diabetic patients and of antibiotics such as penicillin and streptomycin in cases of infection.

No night service, as such, has been instituted but all the district nurses are available for emergency calls at night and, in fact, they are sometimes called.

**Post graduate course.** No post graduate courses are held for district nurses but at quarterly staff meetings consultants and specialists are invited to give talks on subjects likely to be of interest. In recent years, the staff have received talks by medical specialists on such subjects as "The Modern Treatment of Diabetes," "Geriatrics," "B.C.G. Vaccination," "Social Medicine," and so on.

**Queen's Institute of District Nursing.** The Local Health Authority is in membership with the Queen's Institute and arrangements are made with the Institute for district training. At the present time, 38 of the district nurses on the staff (including the Superintendent and her Assistants) are Queen's Nurses.

The District Nursing Service is one which must cover seven days a week and twenty-four hours a day. Adequate reliefs must at all times be provided. In recent years, the difficulty of recruiting staff and providing reliefs to ensure that an efficient service is at all times available has caused serious concern.

Supplementary information usually included in the Annual Report is :—

(i) STAFF.

At the end of the year, 4 whole-time district nurses, 63 whole-time and 8 part-time district nurse-midwives and 6 whole-time health visitor/district nurse-midwives were employed.

(ii) The district nurses attended 7,878 cases, and the total number of visits paid was 160,105.

### AMBULANCE SERVICE (SECTION 27)

The Survey Report was :—

The County Council discharges its duties under Section 27 of the Act to provide an Ambulance Service by arranging with the Voluntary Ambulance Committees and the St. John Ambulance Brigade throughout the County for this service to be undertaken on its behalf. There are 18 voluntary committees in the County and the extent of the work done varies considerably. The mileage undertaken by some of the Committees in the smaller towns may be as low as 1,713 per annum compared with 41,694 per annum undertaken by the committees in the more populous centres. In the larger towns, the committees employ full-time staff ; for example, at the present time, in Kettering one man is employed, in Wellingborough—one, and in Rushden—two. Full use is made of the hospital car service organized by the Women's Voluntary Service. Three of the voluntary committees, however, provide their own cars for sitting cases. When the Local Voluntary Committees are unable to obtain a hospital car under the W.V.S. scheme, they hire taxis. This development of the service was certainly one that was not anticipated and it has grown considerably, amounting in 1952 to approximately 105,000 miles per annum. The outstanding feature of the ambulance service since July, 1948, has been the almost unprecedented demand for the transport of patients and out-patients. A substantial proportion of the work consists in the regular attendance of certain classes of out-patients for treatment such as physiotherapy and radiotherapy.

In the development of the service, the Health Committee has enjoyed close co-operation with the Hospital Management Committees. The Management Committee at Northampton, after discussion, decided to appoint a full-time Transport Officer to co-ordinate all classes of transport. This appointment which was made by the Committee in 1950 has undoubtedly proved of value in the economic and efficient running of the ambulance service to and from the Northampton General Hospital, a large provincial hospital with 485 beds. In the other General



Hospital in the County, namely Kettering Hospital, a separate transport officer was appointed in September, 1952.

To control the service, the County Council in November, 1949, decided to inform general medical practitioners and the Hospital Management Committees that, in their opinion, the words, "Where necessary," in Section 27 meant that transport should be provided only when required on medical grounds. After considerable discussion with the Northampton Hospital Management Committee, who did not agree with this interpretation, it has finally been settled that the decision whether a person visiting hospital from a rural area in which there is no convenient transport should be provided with a hospital car or an ambulance is left to the discretion of the hospital transport officer. This is a satisfactory result as it ensures that the primary consideration, namely the need that no patients should go without treatment because of lack of transport, is met, and at the same time, it provides against abuse of the service.

To enlist the interest of the general medical practitioners in the economic use of the service, circulars were sent to them and a form of medical certificate to be used has been prescribed. Notices regarding the proper functions of the ambulance service were prepared and issued to general medical practitioners for display in their surgeries.

The extent to which the service has been used in the County is shown by the following table giving the ambulance and sitting-case car mileage in the four years from 1949-1952 :

TABLE IX.

<i>Year</i>	<i>Ambulances</i>	<i>Sitting Case Cars</i>	<i>Hired Taxis</i>	<i>Hospital Car Service</i>	<i>Total</i>
1949 ...	192,982	65,689	80,495	222,021	561,187
1950 ...	235,299	61,288	101,304	256,145	654,036
1951 ...	239,262	61,026	124,776	275,151	700,215
1952 ...	242,621½	41,196	105,102	284,526½	673,446

The annual increase in the mileage now seems to be under control and in achieving this result, the Health Committee is indebted to the co-operation of the Hospital Management Committees, the general medical practitioners and the Voluntary Ambulance Committees themselves. In April, 1951, the Ambulance Sub-Committee approved a scheme under which notice of all requests are sent to the Health Department so that ambulances can be directed to collect the maximum number of patients on their way to hospital and to take back as many as convenient on their journey home.

In 1949, representations were received from the Telephone Manager of the Post Office Telephones because a number of Voluntary Ambulance Committees were unable to arrange that only one telephone number was displayed for all emergency calls. After full enquiry, arrangements were finally made for not more than two telephone numbers to be displayed in each Exchange.

Among some unforeseen developments has been the extent to which some hospital car drivers are able to undertake this work. There are, at present, 66 hospital car service drivers whose annual mileage amounts to 284,526. The three drivers who did the most work in 1952 ran 21,241, 16,330 and 16,257 miles.

So far, no voluntary committee has been able to provide an ambulance depot. At Corby, however, the Local Committee make use of a depot which has been erected by the local St. John Ambulance Brigade ; the service, however, is not controlled from the depot, but from a local garage.

The call-out arrangements vary considerably among the Ambulance Committees but a typical example in one of the largest towns is as follows :

A full-time driver is employed and when his ambulance is called to a patient, there are two retired men who are then on call to take the next journey. If, in turn, these men are called out,

a third retired man is available. Should none of the reserves be available, a call is sent to a neighbouring town about three miles away. Many of the Committees are able to make use of the services of volunteers for manning the ambulances at night and at week-ends. One of the reasons which prompted the County Council to delegate the service to voluntary committees was to enable St. John Ambulance Brigade members to continue their former work.

The voluntary committees have all purchased their own vehicles so that varying types of ambulances are used in the service. The County Council, in 1949, bought two Bedford Lomas ambulances which are loaned to two of the committees in the County on condition that the annual grant of £100 is discontinued.

When it became the responsibility of the County Council to bear the cost of sending home from hospital patients who had been resident less than three months, the Council was able to arrange with the Northampton County Borough Council that, whenever possible, ambulances bringing County patients to the hospital should also take them home. In this way, a considerable saving in transport has been effected.

Another saving in transport is secured by an arrangement under which no journey of over 40 miles is undertaken without the special consent of the County Medical Officer of Health. The advantages of transport by rail for patients being sent long distances have been pointed out to general medical practitioners. Cost of rail transport is, of course, very much less than by ambulance and has the further advantage that it does not involve an ambulance being away from the County for long periods.

The removal of infectious disease cases is undertaken by the Northampton St. John Ambulance Brigade for which service the Brigade receives the same grant and mileage rate as for ordinary ambulance work.

The financial arrangements are very simple. First of all, for each ambulance which is approved by the County Council, a grant of £100 p.a. is payable. Secondly, the voluntary committees receive a mileage allowance of 1/3d. per mile for each ambulance and 1/- per mile for each sitting-case car. The Hospital Car Service drivers receive 7d. per mile. The present annual cost of the service is estimated to be £37,500.

The service has worked well. It has the merit of making full use of voluntary resources and the cost per 1,000 population is below the average for all counties. The present arrangements do not, however, form a satisfactory foundation on which an efficient war time ambulance service can be prepared and this important subject is at present being considered by representatives of the Health and Civil Defence Committees.

Supplementary information usually included in the Annual Report is :—

#### ANALYSIS OF MONTHLY MILEAGE AND PATIENTS CARRIED

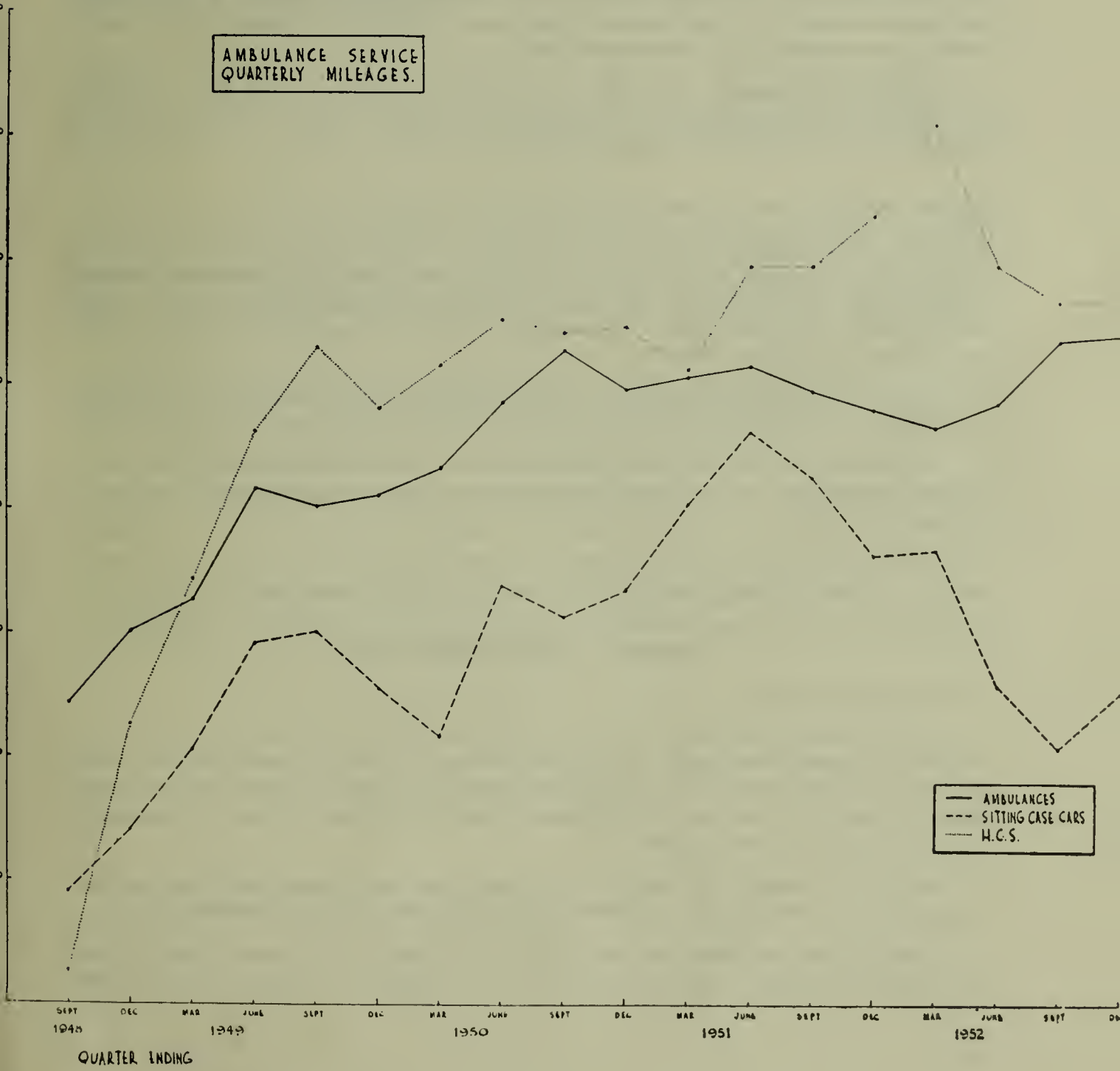
during the year ended 31st December, 1952

Month	<i>Ambulances</i>		<i>Sitting-Case Cars</i>		<i>Hired Taxis</i>		<i>Hospital Car Service</i>		Total No. of Patients	Total Mileage
	No. of Patients	Mileage	No. of Patients	Mileage	No. of Patients	Mileage	No. of Patients	Mileage		
January ...	1,455	19,366	232	4,514	728	10,996	1,692	27,069	4,107	61,944
February ...	1,289	18,874½	190	2,935	748	11,272	1,561	26,434	3,788	59,515½
March .....	1,306	18,446	287	4,518	592	8,286	1,838	27,539	4,023	58,789
April .....	1,229	18,638	271	3,770	581	7,613	1,658	23,539	3,739	53,560
May .....	1,505	19,804	242	3,749	637	9,238	1,905	25,011	4,289	57,802
June .....	1,562	20,191	247	3,951	518	7,657	1,488	21,281	3,815	53,080
July .....	1,817	21,376	186	3,574	671	9,709	1,947	24,753½	4,621	59,412½
August .....	1,683	21,791	117	1,858	451	6,513	1,712	20,533	3,963	50,695
September	1,913	20,842	125	2,590	563	7,479	1,987	21,706	4,588	52,617
October.....	1,814	22,006	179	3,526	650	8,205	1,818	22,227	4,461	55,964
November...	1,718	20,178	147	2,603	679	8,285	1,906	23,714	4,450	54,780
December ...	1,733	21,109	172	3,608	714	9,849	1,650	20,721	4,269	55,287
TOTAL ...	19,024	242,621½	2,395	41,196	7,532	105,102	21,162	284,526½	50,113	673,446



		No. of Vehicles	Total No. of Journeys	Total No. of Patients carried	No. of Accident and other emer- gency journeys	Total Mileage
Directly provided service	Ambulances ...	2 (Reserves)	—	—	—	—
	Cars .....	—	—	—	—	—
Agency Services	Ambulances ...	25	9,992	19,024	3,778	242,621½
	Cars .....	3	1,281	2,395	163	41,196
Hospital Car Service.....			10,480	21,162	—	284,526½
Hired Taxis .....			3,562	7,532	589	105,102
TOTALS .....			25,315	50,113	4,530	673,446

The above figures show that compared with the previous year there has been an increase in the mileage undertaken by ambulances and the Hospital Car Service and a reduction in the mileage of the hired taxis and the sitting-case cars owned by three voluntary committees. The total mileage shows a decrease over the previous year and the County Council is indebted to the Hospital Management Committees, general practitioners and the voluntary ambulance organizations for their co-operation.





At the end of 1952, twenty-seven ambulances were in service, of which twenty-five were first-line operational vehicles and two were reserves. Four of these vehicles are owned by the County Council while the remainder are provided by the voluntary organizations.

### PREVENTION OF ILLNESS, CARE AND AFTER-CARE (SECTION 28)

The Survey Report was :—

**Loan Cupboard Scheme.** The County Council have made arrangements with the British Red Cross Society and the Order of St. John to carry out a loan comforts scheme throughout the County. The basis of the scheme is that 90% of the approved cost of replacing suitable articles is reimbursed by the County Council. The work of the voluntary organizations in carrying out this service which is so valuable to many patients who are nursed at home is greatly appreciated.

In addition, the district nurses all maintain a small loan cupboard of their own, the equipment being directly provided by the County Council.

**Research.** The County Council has regarded it as one of their important functions in the discharge of their duties under Section 28 that they should, as far as possible, co-operate in all research enquiries. In addition to the research projects sponsored by the Population Investigation Committee and by the Ministry of Health (in relation to the incidence of retrolental fibroplasia) the Health Department has, in co-operation with the Institute of Social Medicine, carried out enquiries about still-births, neo-natal deaths and live births in the County with a view to obtaining information which will save infant life.

**Convalescent Treatment.** The County Council has informed all general medical practitioners that applications for admission to convalescent homes will be considered. Since July, 1948, 58 patients have been sent to convalescent homes.

Supplementary information usually included in the Annual Report is :—

During 1952, seventeen patients, including three children and two mothers with their babies were recommended for treatment and vacancies were obtained in convalescent homes at Bournemouth, Exmouth, Eastbourne, Felixstowe, Dartford, Woodford (Essex), Isle of Wight, Alton (Hants) and Littlehampton. The average period of residence was seventeen days at a cost of £6/11/2 per patient.

In two cases, application was made by the convalescent home authorities for an extension of two weeks to the patients' period of convalescence ; this was granted in both cases.

Patients admitted to convalescent homes under the scheme are required to make a contribution according to the scale of the County Council. The average contribution per patient amounted to £1/15/5.

Provision is also made to pay the travelling expenses of patients, and, where necessary, of escorts. The fares of one patient and escort were met by the County Council.

### DOMESTIC HELP (SECTION 29)

The Survey Report was :—

From experience obtained prior to July, 1948, the Health Committee were aware of the difficulty of finding home helps. In Northamptonshire, two of the main industries, namely boot and shoe manufacture and clothing, provide full employment for women, many of whom continue to work after marriage. In the urban districts of the County, there is consequently a very great demand for female labour.

The Health Committee did not agree to the suggestion that a Home Help Organizer should be appointed and consequently the administration of the service is on the following lines :

All applications for a home help are referred to the district nurses, many of whom, as would be expected, submit applications on behalf of their own patients. The district nurse is asked

to report on the extent of the household duties, if any, which can be undertaken by the patient and to give her opinion on the number of hours per week the home help should work. Each application is considered, personally, by the County Medical Officer of Health or his Deputy and if approved, is reviewed according to the apparent medical needs of the case either fortnightly, monthly, or in chronic cases, at three monthly intervals. The applicants are informed of the contribution which they will have to make towards the service, the scale used being one which was recommended by the County Councils Association in 1948. In cases where there is *prima facie* need for the revision of the assessment or if an appeal is received, the circumstances are referred to the Chairman of the Maternity, Nursing and Care Sub-Committee for her consideration. The Committee has arranged with the Welfare Committee that the officers of the latter committee should collect the contributions. The method of administration obviously makes considerable use of the services of the district nurses and of the assistant superintendents. The view was held, however, that the district nurses are the best qualified persons in the field to assess the needs of each case. Where the services of a home help have been continued for a period of a year, the Superintendent Nursing Officer is asked to visit and report whether assistance is still needed.

Efforts have been made, from time to time, by advertisements in the local press, to obtain the services of full-time home helps. No home helps have ever been recruited with the result that the service depends entirely on finding local women to help in each case. There are probably considerable advantages in employing casual home helps because the planning of the day to day duties of full-time home helps requires considerable office work, and other authorities have found that full-time home helps, practically all of whom have to tackle their own house work in addition, tend in consequence to have comparatively high sickness rates. Special precautions to protect home helps where they are employed in tuberculous households have been taken. A list of the necessary precautions is sent to the district nurse who explains them to the home help and, also, advantage is taken, when the Mass Radiography Unit is in the neighbourhood, to arrange for these home helps to attend.

The policy of the Committee is not to employ relatives of patients as home helps. Applications have been received from daughters to be employed as home helps to look after their invalid parents. The view has been taken by the Health Committee that in these circumstances the need is not for a home help, since the daughter is available, but for financial assistance, and the applicant has accordingly been advised that she can apply to the National Assistance Board.

A note that was included in an issue of the Journal distributed to all Parish Councils stated that the Councils were invited to co-operate in this service by submitting the names of suitable women to act as home helps and it was explained, "That this service was never intended to take the place of good neighbourliness which prompts people to give one another generous help in times of difficulty and which has been a characteristic of rural life for generations."

Close co-operation is maintained with the hospital almoners who, prior to the discharge of patients from hospital, frequently apply to the Health Department for the services of home helps.

There are no facilities for training. It is left to the district nurse to be satisfied that women recommended to her as home helps are persons of satisfactory character who are able to keep their own houses in good order.

Supplementary information usually included in the Annual Report is :—

Details of cases assisted are :

<i>Type of case</i>	<i>No. of Cases</i>	<i>No. of hours' help provided</i>	<i>Percentage of total no. of hours</i>
Maternity (including antenatal and postnatal) ...	28	2,741½	7
Chronic Sickness ... ..	129	24,835	63
Acute Illness ... ..	51	9,876	25
Tuberculosis ... ..	6	1,037½	3
Mother in hospital or sanatorium ... ..	6	781	2
TOTAL ... ..	220	39,271	100

It will be seen from the above table that the majority of cases are suffering from chronic sickness and the provision of a domestic help in many instances must save admission to hospital.

The cost per 1,000 of the population was £8 18s. 0d. and the cost per case £14 5s. 0d. (Financial year ended 31st March, 1952.)



## SECTION C.

## Sanitary Circumstances of the Area.

A tabular statement giving details of water supplies, drainage and sewerage in the several parishes of each rural district is given in Table VIII., pages 78-83.

## WATER SUPPLY.

**Rural Schemes.** The following schemes were submitted in accordance with the provisions of the Rural Water Supplies and Sewerage Act, 1944, for the observations of the County Council, and were approved in principle.

<i>Water Supply Authority</i>	<i>Scheme</i>	<i>Estimated Cost</i>
Mid-Northants Water Board	8" main from Brafield to Great Houghton	£8,320
	Replacement of certain lengths of distribution mains by larger diameter pipes, Woodford-cum-Membris	£2,432
	Western Area Scheme, to supply 19 parishes in Daventry Rural (15), and Brixworth Rural (4) Districts, from the Ravensthorpe Reservoir, upon completion of the new Pitsford Reservoir	£76,700
	Southern Area Scheme, to supply Daventry Borough and parts of Daventry and Northampton Rural Districts, from Pitsford Reservoir	£213,500
	Eastern Area Scheme, to supply the Urban Districts of Wellingborough and Burton Latimer and small parts of the Kettering and Wellingborough Rural Districts from Pitsford Reservoir	£5,000

## SEWERAGE AND SEWAGE DISPOSAL.

**Rural Schemes.** The following schemes were submitted in accordance with the provisions of the Rural Water Supplies and Sewerage Act, 1944, for the observations of the County Council, and were approved in principle.

<i>Local Authority</i>	<i>Scheme</i>	<i>Estimated Cost</i>
Kettering Rural District Council	Sewerage and sewage disposal, Grafton Underwood	£12,700
	Sewerage and sewage disposal, Stanion	£14,500
	Sewerage and sewage disposal, Cransley	£9,800
Northampton Rural District Council	Extensions of original schemes of sewerage for (a) Brafield, (b) Bugbrooke, and (c) Ashton to serve additional houses	(a) £2,426/10/0 (b) £2,662 (c) £1,700
	Extension of original sewerage scheme for Nether Heyford to serve additional houses (at Heyford Wharf)	£4,540

### Contributions under the Rural Water Supplies and Sewerage Act, 1944.

The Ministry of Health having indicated the amount of grant payable by that department towards the cost of certain approved water supply and sewerage schemes, the County Council agreed the payment of the following contributions, in accordance with the approved scale :

<i>Local Authority</i>	<i>Scheme</i>	<i>Estimated Cost</i>	<i>Ministry of Health Grant</i>	<i>County Council's contribution. Capital Sum. Loan Charges</i>
Brackley Rural District Council	Sewerage and Sewage Disposal—Croughton Culworth, Chipping Warden, Chacombe, Moreton Pinkney (Amended scheme, previously submitted in 1947)	£92,280	£54,000	(£25,540) £1,521 per annum for 30 yrs.
*Brixworth Rural District Council	Sewerage and Sewage Disposal—Naseby	Increased from £9,100 to £19,700	Increased from £3,000 to £9,000	(Increased from £3,000 to £6,750) £344/7/0 for 30 yrs.
	East Haddon	Increased from £15,800 to £28,100	£13,500	(£10,125) £603/8/0 per annum for 30 yrs.
*Kettering Rural District Council	Sewerage and Sewage Disposal—Weldon	Increased from £28,300 to £32,400 and to £51,365	£16,500	(£16,500) £875 per annum for 30 yrs.
*Oundle and Thrapston Rural District Council	Sewerage and Sewage Disposal—Kings Cliffe	Increased from £19,500 to £31,000	Increased from £6,500 to £10,000	(Increased from £6,500 to £10,000) £543 per annum for 30 yrs.
Towcester Rural District Council	Sewerage—Cosgrove, Deanshanger, Furtho, Passenham, Potterspury, Wicken, Yardley Gobion	Increased from £54,680 to £103,293	£60,000	(£28,862) £1,720 per annum for 30 yrs.
*Oundle and Thrapston Rural District Council	Water Supply—Chelveston	Increased from £7,576 to £8,336	£1,600	(£1,600) £95 per annum for 30 yrs.
Towcester Rural District Council	Regional Water Supply—	£222,432	£90,000	(£74,144) £3,782/15/6 per annum for 30 yrs.

\* Revision of contributions of schemes approved in previous years.

## SECTION D.

## Rural Housing.

## Joint County Committee on Rural Housing.

No meetings of the Committee were held.

## Provision of New Housing Accommodation.

The following table shows the post-war record of the Rural Housing Authorities up to 31st December, 1952, and the number of houses completed during 1952.

RURAL HOUSING AUTHORITY	<i>No. under construction at 31.12.52</i>	<i>Houses built or building</i>			<i>Total No. of Houses completed at 31/12/52</i>	<i>No. of post-war houses completed per 1,000 of population</i>
		PERMANENT <i>No. completed up to 31.12.51</i>	<i>No. completed during 1952</i>	TEMPORARY <i>No. completed</i>		
Brackley	63	257	32	—	289	29.2
Brixworth	60	362	40	—	402	22.7
Daventry	62	424	56	—	480	29.5
Kettering	74	318	108	—	426	34.9
Northampton	172	843	128	40	1,011	51.6
Oundle and Thrapston	90	278	61	40	379	20.5
Towcester	60	567	64	30	661	45.3
Wellingborough	85	325	63	—	388	29.8
TOTALS	666	3,374	552	100	4,036	MEAN = 33.2

## Unfit Houses.

The Rural Housing Survey was completed in the County in 1948 with high hopes that it would presage an early start on the formidable task of dealing with the large numbers of unfit houses revealed by the Survey. In each succeeding year, however, principally owing to the overriding need for providing houses to remedy an acute overall shortage of accommodation, very little could be done by any of the rural district councils, except in a few extremely urgent cases, to secure reconditioning or demolition of unfit houses. Some rural districts had, indeed still have, a number of houses subject to Demolition or Clearance Orders since the pre-war period, although the number has been reduced by securing their demolition as and when they become vacant. A beginning has, however, now been made in almost all rural districts with what is commonly known as slum clearance. The summary of returns from Rural District Councils given in Table VII., shows that, up to 31/12/52, 349 unfit houses had been dealt with either by Demolition Order or Clearance Area procedure, in the rural districts. In most of these districts it has now become possible to allocate a percentage, even though it be small, of new houses to rehouse occupants of unfit houses, and as the overall shortage of houses tends to be overcome it will be possible to allocate an increasing proportion of new houses for this purpose.

Although a full scale effort to eradicate unfit houses is not yet within sight, we may confidently expect improving results in this important task in succeeding years.



## SECTION E.

## Food and Drugs

## 1. MILK SUPPLY.

- (a) MILK (SPECIAL DESIGNATION) (PASTEURISED AND STERILISED MILK) REGULATIONS, 1949, impose upon the County Council the duty of licensing and supervising milk pasteurising and sterilising plants.

- (i) No. of licensed pasteurising plants as at 31st December, 1952 ..... 9  
 (ii) Reports received upon samples submitted to the Public Health Laboratory for submission to statutory tests for pasteurised milk :

	RESULTS		
	<i>Passed</i>	<i>Failed</i>	<i>Invalid or not tested</i>
Methylene Blue Test .....	348	—	13
Phosphatase Test .....	347	7	7

- (b) FOOD AND DRUGS (MILK, DAIRIES AND ARTIFICIAL CREAM) ACT, 1950, SECTION 8, prohibits the sale of tuberculous milk, and milk of cows suffering from tuberculosis and other scheduled diseases. In order to enforce this provision samples of raw milk are submitted for biological examination. There are approximately 380 producer-retailers and 50 retail distributors of raw milk in the County. Many registered producer-retailers are, in fact, very small dealers. The retail distributors obtain their milk either from large creameries or from one or more producers.

There are, in all, some 1,400 producers of milk in the County ; those who are not also retailers, consign their milk in bulk to one of the large creameries for pasteurisation. After pasteurisation, milk produced in the County is re-distributed for consumption not only in Northampton County Borough and Northamptonshire, but in towns and areas surrounding the County, and also in London.

The number of samples which could be accepted by the Public Health Laboratory for biological examination was limited by the supply of guinea pigs. In these circumstances a sampling system was adopted under which samples were obtained of non-pasteurised milk sold by principal retail distributors and producer-retailers needing special attention. For example, samples were taken from suppliers to patients notified as suffering from tuberculosis of possible bovine origin.

## RESULTS

	<i>Producer-Retailers</i>			<i>Retail Distributors</i>		
	<i>Passed</i>	<i>Failed</i>	<i>Invalid or Not Tested</i>	<i>Passed</i>	<i>Failed</i>	<i>Invalid or Not Tested</i>
<b>Tuberculin Tested</b>						
Methylene Blue Test ...	9	2	—	18	11	1
Tubercle ... ..	10	—	1	30	—	—
Brucella abortus ...	7	1	3	24	2	4
<b>Accredited</b>						
Methylene Blue Test	2	—	—	4	1	—
Tubercle ... ..	2	—	—	4	—	1
Brucella abortus ...	—	1	1	3	—	2
<b>Non-designated</b>						
Methylene Blue Test	10	10	—	3	1	—
Tubercle ... ..	19	—	1	4	—	—
Brucella abortus ...	13	1	6	4	—	—
<b>TOTALS ... ..</b>	<b>72</b>	<b>15</b>	<b>12</b>	<b>94</b>	<b>15</b>	<b>8</b>

Appropriate action was taken in respect of all unsatisfactory results.

## (c) SCHOOL MILK SUPPLIES.

Every opportunity is taken to improve supplies by the substitution of designated milk for ungraded milk, or by the provision of a bottled supply in the place of bulk supply. At the end of the year only two schools were supplied with unbottled milk ; they are situated in villages where no bottled supply is at present available.

Details of school milk supplies as at 31st December, were :

	<i>No. of Suppliers</i>	<i>No. of Schools Supplied</i>
Pasteurised Milk .....	*50	252
Tuberculin Tested Milk .....	†19	35
Accredited Milk .....	1	1
Non-designated Milk .....	3	3
	<hr/> 73	<hr/> 291

\* Of this number, 14 are pasteurisers and main distributors supplying direct to 145 schools from licensed pasteurising plants, 9 of which are situated in Northamptonshire ; the remaining 36 retail milk pasteurised by one or other of the main distributors.

† Of the 19 suppliers of Tuberculin Tested milk, 16 are producer-retailers supplying 28 schools ; the remainder are dairymen obtaining milk from one or more sources.

All other suppliers are producer-retailers.

A system of selective sampling of milk supplied to schools was adopted, representative samples being taken from the suppliers rather than from individual schools. Raw milk samples were submitted for biological examination for tubercle and *Brucella abortus*. The phosphatase test was applied to pasteurised milk. In addition, all samples of milk were submitted to the Methylene Blue test for keeping quality.

Reports were as follows :

		RESULTS		
		<i>Passed</i>	<i>Failed</i>	<i>Invalid or Not Tested</i>
(a)	<i>Tuberculin Tested</i>			
	Methylene Blue Test .....	19	7	—
	Biological examination for tubercle .....	24	1	1
	Biological examination for <i>Brucella abortus</i> .....	24	1	1
(b)	<i>Non-designated</i>			
	Methylene Blue Test .....	4	1	—
	Biological examination for tubercle .....	4	1	—
	Biological examination for <i>Brucella abortus</i> .....	5	—	—
(c)	<i>Accredited</i>			
	Methylene Blue Test .....	1	—	—
	Biological examination for tubercle .....	1	—	—
	Biological examination for <i>Brucella abortus</i> .....	1	—	—
(d)	<i>Pasteurised</i>			
	Phosphatase Test .....	33	—	5
	Methylene Blue Test .....	35	2	1

Appropriate action was taken where there were adverse reports. 51 samples of milk submitted for bacteriological examination were also subjected to tests for fat content and solids-not-fat in the Health Department Laboratory, 1 being found unsatisfactory respecting fat content, 4 being slightly below the statutory requirements for solids-not-fat.

Co-operation is maintained with the Chief Inspector, Weights and Measures Department, thus avoiding duplication of sampling.

## 2. PUBLIC HEALTH : REGULATIONS.

No action was necessary under the following Regulations :

Public Health (Condensed Milk) Regulations, 1923, 1927 and 1943.

Public Health (Preservatives, etc., in Food) Regulations, 1925, 1926, 1927 and 1940.

Public Health (Dried Milk) Regulations, 1923, 1927 and 1943.

## 3. ADULTERATION, etc.

### FOOD AND DRUGS ACT, 1938.

The Chief Inspector of Food and Drugs (Mr. A. E. Waller) reports :

During the year ended December 31st, 1952, 769 samples were submitted to the Public Analyst for the County (E. Voelcker, Esq., A.R.C.S., F.R.I.C.) for examination under the above Act, and of this number 134, or 17.4 per cent, were the subject of adverse comment. The samples submitted were as follows :

Milk .....	478		Brought forward	634
Channel Island Milk .....	13	Fish Cakes .....		4
Sterilised Milk .....	1	Faggots .....		2
Condensed Milk .....	2	Sausages and Sausagemeat .....		35
Milk Food .....	1	Haslet .....		1
Processed Cheese .....	2	Brawn .....		3
Ice Cream .....	27	Pressed Pork .....		1
Synthetic Cream .....	2	Tinned Chicken and Ham in Gravy ...		1
Butter .....	11	Beef and Vegetable Weaning Food ...		1
Margarine .....	4	Beef Rissoles .....		1
Lard .....	2	Pork Pie .....		1
Lard Compound .....	1	Gravy Salt .....		2
Beef Suet .....	4	Pepper .....		2
Vegetable Fat .....	1	Sauce .....		1
Morfat Whipping .....	1	Salad Cream .....		3
Beef Dripping .....	1	Malt Vinegar .....		17
Tea.....	2	Mincemeat .....		5
Coffee .....	1	Gelatine and Jellies.....		7
Coffee and Chicory Essence .....	8	Rollo .....		1
Coffee and Chicory .....	1	Ground Almonds .....		3
Cornflour .....	1	Tea Saving Tablets .....		1
Custard Powder .....	4	Lime Juice Cordial .....		1
Ground Rice .....	1	Pineapple Juice .....		1
Meringue Powder.....	1	Beer .....		2
Flaked Tapioca .....	1	Rich Ruby Type Wine .....		1
Sago .....	1	Gin .....		3
Self-Raising Flour .....	3	Whisky .....		17
Sweetened Sponge Mixture .....	1	Ribena .....		1
Puff Pastry .....	1	Aspirin .....		5
Shortbread .....	1	Bengers Food .....		1
Krusto Pastry Maker .....	1	Horlicks .....		1
Cream Sandwich .....	1	Brockham High Protein Food .....		1
Golden Raising Powder .....	2	Beechams Powders .....		1
Baking Powder .....	6	Cephos Powders .....		1
Jams, Marmalade, etc. ....	27	Cephos Tablets.....		1
Honey .....	2	Birley's Antacid Powder .....		1
Tinned Fruit and Vegetables.....	11	Birley's Antacid Tablets .....		1
Dried Figs.....	1	Juno Junipah Tablets.....		1
Canned Soup .....	2	Juno Junipah Mineral Spring Salts ...		1
Tinned Crabmeat.....	1	Halibut Liver Oil .....		1
Cockles in Malt Vinegar .....	1	Liquid Paraffin .....		1
Fish Dressing .....	1			
		TOTAL .....		769
Carried forward	634			

MILKS. 492 milks in all were submitted, thirteen of which were Channel Island Milk, one sterilised milk, and six were "Appeal-to-Cow" samples. Of the 486 milks ordinarily obtained, i.e., omitting the "appeal" samples, as many as 132 were either adulterated or below standard. The following is a summarised list of the unsatisfactory samples :



<i>Quarter</i>	<i>Added Water</i>	<i>Deficient in fat</i>	<i>Deficient in S.N.F. but not due to added water</i>	<i>Total</i>
March .....	1	3	47	49
June .....	2	16	9	25
September .....	8	19	29	52
December .....	5	—	1	6
TOTAL .....	16	38*	86*	132

\* 8 samples were deficient in both fat and solids-not-fat and appear in both columns.

132 unsatisfactory samples from a total of 486 is again a very high proportion, being no less than 27.1 per cent compared with 24.1 per cent last year. So that no wrong impression should be created by the high proportion of unsatisfactory samples it should again be stressed that the results are indicative of the work of the Inspectors in finding and following up milk which is below standard. When, by means of informal sampling, or from information gained by other means, milk is shown to be deficient in fat or in solids-not-fat, the only way of ascertaining whether or not the milk has been adulterated is to submit a sample to the Public Analyst who can make a freezing point test in addition to the ordinary chemical tests. It would be wrong to assume that 27 per cent of the milk consumed within the County is below standard.

It is true that at particular times of the year more milk is below the presumptive standards than used to be the case, but so long as there is no precise legal standard for the compositional quality of milk and so long as no legal action can be taken in respect of poor quality milk, not all producers will attempt to obtain quality at the expense of quantity.

Of the 132 unsatisfactory samples of milk only 16 were adulterated by the addition of water. In three of these samples the percentage of water was very small and no action was deemed necessary. Legal proceedings were taken against three persons in respect of 7 samples containing added water with the results given below. Normal proceedings were started against the seller of 6 other adulterated samples but the charges were withdrawn owing to the death of the defendant a few days before the cases were due to be heard.

Natural poorness must be the description best applied to the large number of milks deficient in either fat, solids-not-fat, or both. In one instance "appeal-to-cow" samples did not confirm the natural poorness of the milk, samples taken two days earlier being deficient in fat by 16.6 per cent and 40 per cent, and proceedings were successfully taken.

#### INFORMAL MILK SAMPLING.

Reference has been made above to informal sampling of milk and 307 samples were so obtained and tested by the Inspectors in their own offices. Such testing assists in the detection of unsatisfactory milk and the obtaining of samples in this way frequently saves time and expenditure in travelling.

#### MILK IN SCHOOLS.

Informal sampling and testing of milk supplied to schools within the County was continued by both the County Sanitary Officer, Mr. R. E. T. Chinnery, and Inspectors of my department. The co-operation which exists allows for rather more samples to be tested and prevents duplication of visits to the schools.

124 samples were taken and although a few showed deficiencies in fat or solids-not-fat, follow-up and formal samples submitted to the Public Analyst confirmed that the milk was not adulterated.

#### SAMPLES OTHER THAN MILK.

277 samples of a wide variety of foodstuffs and drugs were procured and adverse comment was made by the Public Analyst on only 2 samples and even in these two instances there was no complaint as to the ingredients. In the case of some toffee the percentage of butter did not

appear to justify either the illustration or the wording contained in an advertisement. On a representation being made to the manufacturers the advertisement was immediately withdrawn.

A table jelly was satisfactory so far as its ingredients were concerned but failed to set satisfactorily when tested in the manner prescribed by the Table Jellies Order. The matter was dealt with by a caution.

None of the samples was criticised for excess of permitted preservative or metallic contamination. Where standards for compositional quality were in force, the samples complied ; where no standards were prescribed, the articles were as described either by name or by the list of ingredients indicated on the package.

The standard of purity of samples other than milk thus continues to be very high.

#### TOTAL NUMBER OF SAMPLES.

For all purposes of administration of the Food and Drugs Act, 1938, the number of samples dealt with were as follows :

Submitted to the Public Analyst .....	769
Informal Milk Samples .....	307
School Milk Samples (informal) .....	124
	<hr/>
	1,200
	<hr/>

These figures show a total increase of 89 samples and also the largest total ever attained. It is not expected that the high figure will be reached regularly.

A comparative table is given showing the number of samples submitted for analysis, the number reported against, and the results of prosecutions :

Year.	Samples submitted for analysis	Samples reported against		Amount of fines and costs in prosecutions
		Number	Percentage	
1948	624	87	13.9	£125 8 0
1949	652	115	17.6	£131 7 0
1950	690	88	12.7	£93 17 0
1951	749	120	16.0	£44 2 0
1952	769	134	17.4	£57 9 0

Legal proceedings during the year were taken successfully, with the results as under :

MILK				Fines		Costs	
				£	s. d.	£	s. d.
1.	12.4 per cent added water .....	Milk retailer .....		1	0 0	1	1 0
2.	12.3 „ „ „ „ .....	Producer-retailer .....		1	0 0	1	1 0
3.	9.4 „ „ „ „ .....	Producer .....		2	0 0	5	5 0
	6.0 „ „ „ „ .....	„ .....		2	0 0	—	
	4.7 „ „ „ „ .....	„ .....		2	0 0	—	
	4.3 „ „ „ „ .....	„ .....		2	0 0	—	
	2.8 „ „ „ „ .....	„ .....		2	0 0	—	
4.	40.0 per cent deficient in fat .....	Producer .....		7	10 0	1	1 0
	16.6 „ „ „ „ „ „ .....	„ .....		7	10 0	1	1 0

#### OTHER THAN MILK

5.	Claiming vitamins in an advertisement of food and failing to state in the advertisement or on the wrapper which vitamins were present and in what amount .....	Biscuit manufacturer .....		21	0 0	—	
TOTALS				£48	0 0	£9	9 0

TOTAL ... £57 9 0

# THE DEFENCE (SALE OF FOOD) REGULATIONS, 1943.

The Regulations make it an offence to describe food falsely, either on a label or in an advertisement and it is also an offence if the description is otherwise likely to mislead as to the nature, substance or quality of the food or, in particular, as to its nutritional or dietary value.

Further requirements concerned with the labelling and advertising of food are contained in the Labelling of Food Order, 1950. Among these latter requirements are those concerning claims for the presence of vitamins and minerals. With certain exceptions, the general requirement is that where vitamins or minerals are claimed to be present in the food then the vitamin or mineral must be specified by name and the amount present in one ounce of the food must be stated either in the advertisement or on the wrapper of the food.

The importance of vitamins and certain minerals in the diet is generally recognised and it has certainly not been overlooked by many sellers and advertisers of foodstuffs. It is accepted that advertisers can and do make the most of what can be said for their products and some advertisements are quite unexceptionable in that they state only what can properly be stated. Exaggerations of a kind which can be misleading as to the nutritional or dietary value of foods are, however, made in advertisements despite the code of practice which was framed by the Minister of Food after consideration of recommendations by the Medical Research Council.

The code of practice has no legal significance but provides guidance in making claims of nutritional value due to the presence of vitamins. It is fairly obvious that the dietary value of vitamins and minerals depends not only on the amount present in a given quantity of a particular food, but on the amount present in that quantity of food which a consumer ordinarily takes in a day.

Advertisements and labels have been scrutinised and several instances of exaggerated claims have been dealt with. On representations having been made to the advertisers the claims, mainly in respect of "richness" or "abundance" of vitamins or minerals, have been modified.

Proceedings were instituted in one case of a clear omission to state the vitamin present in the food when it was claimed in the advertisement to be "packed with essential vitamins." As will be seen from the list of prosecutions, the proceedings were successful.

Nothing more than a general reference can be made under this heading as the offences by advertisers were, except in the single case mentioned above, only alleged. It is true that the advertisements were amended on the alleged offences being brought to the notice of the advertisers but as the cases were not brought before the magistrates and thus no judicial enquiries and decisions were made, it would be improper for detailed mention to be made in this report. It is felt that although the field is somewhat limited some useful results are being obtained.



## SECTION F.

### Prevalence of, and Control over, Infectious and other Diseases.

#### 1. INFECTIOUS DISEASES.

**Smallpox.** No case was notified.

**Scarlet Fever.** 292 cases of this infection were notified as compared with 267 in 1951. In the main the infection appeared to be of the mild clinical type and approximately half the cases occurred in the 5-9 year age group. The distribution was general, but the highest incidence occurred in the industrial belt. The notification rate was 1.15 per thousand of population, as compared with 1.53 for England and Wales.

**Diphtheria.** No case was notified.

**Erysipelas.** 34 cases were notified as compared with 44 in 1951.

**Typhoid.** One case was notified in Desborough ; the source of infection was ascertained to be another member of the family who was a carrier.

**Paratyphoid.** Ten cases of this infection were notified in the County area.

**Puerperal Pyrexia : Ophthalmia Neonatorum.** These diseases are dealt with in the Maternity and Child Welfare Section of this Report.

**Pneumonia (Acute Primary and Acute Influenzal).** 171 cases were notified, of which approximately one-third occurred in Kettering and Wellingborough. The notification rate was 0.66 per thousand of population, as compared with 0.72 for England and Wales. The infection was distributed evenly throughout the various age groups and half the cases were notified in the first quarter of the year. 92 deaths were attributable to all forms of pneumonia, as compared with 116 in 1951.

**Measles.** The majority of cases were notified during the last quarter of the year and the incidence was highest in the Wellingborough, Corby and Oundle areas. Relatively few children under the age of one year were affected and the majority of cases occurred in the 1-9 year age groups—a favourable factor since complications are more likely to be fatal in the youngest age group. 2,600 cases were notified, as compared with 2,642 in 1951. One death resulted from complications of this disease. The notification rate was 10.11 per thousand of population, as compared with 8.86 in England and Wales.

**Whooping Cough.** There were 612 notifications of this infection as compared with 919 in 1951, and the greatest number of cases occurred in the first six months of the year, after which the infection gradually died out. The majority of cases occurred in the 1-5 year age group and the seriousness of the illness is associated with the complications which are more prone to occur in the earliest years of life. Two infants died from this infection. The notification rate was 2.38 per thousand of population, as compared with 2.61 for England and Wales.

**Acute Poliomyelitis.** A total of eight confirmed cases of poliomyelitis were notified as compared with 33 in 1951. Of these eight cases, four were paralytic and four non-paralytic. Two patients died from this disease, both of whom were in the 15-25 year age group. The notification rate was 0.03 per thousand of population, as compared with 0.09 for England and Wales.

**Meningococcal Infections.** Two cases were notified, both in Kettering Borough, and one death occurred in a child under five years.

**Dysentery (Bacillary).** 40 cases of Dysentery were notified—nearly half of them in Higham Ferrers—as compared with a total of 132 cases in 1951.

**Food Poisoning.** 57 cases were notified ; a number of these resulted from the outbreak of food poisoning which originated in the last week of 1951 and continued into the first week of 1952, the causal organism being *Salmonella Minnesota*.

## 2. VACCINATION AND IMMUNIZATION.

The Survey Report was :—

(i) **The procedure relating to Diphtheria immunization in this County is as follows :**

**PRIMARY IMMUNIZATIONS.** When an infant is three months old a leaflet is sent to the parents advising them that the baby should be immunized against diphtheria either by their own doctor or at a clinic. The health visitor, who visits the family at regular intervals, usually recommends that immunization should be started at about five to six months. Special immunization clinics are held at various centres throughout the County and combined Diphtheria-Pertussis Prophylactic is the vaccine of choice. If the parents fail to have their baby immunized, the health visitor makes repeated visits in an attempt to obtain their consent. In a number of cases these repeated visits are successful, but there remains a small number of people who are either prejudiced, lazy, or ignorant.

The Health Committee relies on the Health Visitor to ensure that the advantages of immunization are fully represented to parents of all children. There is no doubt that it is very largely due to the unremitting work of the health visitors that immunization has now become accepted as a safe and wise routine procedure by most parents.

Co-operation with the general practitioner service is good, and the statistics indicate that approximately two-fifths of all immunizations are carried out by general practitioners and three-fifths by the County Council staff.

Table V. indicates the percentages of children immunized in the age groups, 0-4 and 5-15.

**TABLE V.**

<i>Year</i>	<i>Percentage immunized 0-4 years</i>	<i>Percentage immunized 5-15 years</i>	<i>Percentage immunized 0-15 years</i>
1942	46	74	65
1943	56	83	73
1944	58	84	78
1945	56	89	76
1946	52	95	79
1947	48	94	75
1948	50	92	74
1949	50	86	73
1950	51	82	70
1951	51	79	68
1952	50	79	69

**INWARD TRANSFERS.** When families move into the County from outside, the health visitor's record card relating to them is sent to the County Office by the Health Authority for the area from which they moved. If there is no record of the child having been immunized, the Health Visitor calls and gives the advice outlined above.

**REINFORCING INJECTIONS.** Parents of infants in their first year of school attendance are notified when their children are going to be examined by the school medical officer. At the same time it is recommended to them that their child should receive a reinforcing immunization to protect against increased risks associated with entering the school community. A consent



form is sent to the parents who are advised that their children can be immunized either by the medical practitioner or by one of the Assistant Medical Officers. If the child has not been immunized previously, the parents are again advised that this should be done in the child's interests.

**HEALTH EDUCATION.** Health education is undertaken chiefly through the health visitors who, as previously stated, are solicitous in their advice, and who pay special attention to those families (which do not attend the welfare clinics) where it is known that the children have not been immunized. Diphtheria immunization campaigns are conducted when and where it is considered suitable; arrangements are made for trailer films or slides to be screened at the appropriate cinemas; any alteration in the time of a clinic is notified to the public through the local Press.

**POLIOMYELITIS.** It should be borne in mind that in mid-1949 several articles were published which indicated that children who contracted poliomyelitis within three months of being immunized were likely to suffer from a more severe attack than children not immunized. The publicity given to this subject in the National Press almost certainly acted as a curb on the rising immunization figures; and, to combat this, arrangements are made to concentrate the main immunization campaign into those months when the incidence of poliomyelitis is lowest.

## (ii) Immunization against Whooping Cough.

**PRIMARY IMMUNIZATIONS.** Parents are advised to bring their children to the clinic at the age of five to six months in order that they may be immunized against whooping cough. As indicated above, the combined Diphtheria-Pertussis Prophylactic is the method of choice, but at the discretion of the doctor, immunization against whooping cough and diphtheria may be carried out separately. It may be that, in a weakly child, it is considered advisable that whooping cough immunization should be undertaken at the age of five to six months, but that immunization against diphtheria should be postponed until the ninth or tenth month. Immunization against whooping cough has been carried out by Medical Officers of the Local Health Authority since January, 1949, when the amendment to the proposals made under Section 26 of the National Health Service Act, 1946, was approved by the Ministry of Health.

Table VI. shows the numbers of children immunized against whooping cough in the years indicated.

TABLE VI.

<i>Year</i>	<i>No. Immunized during year</i>		<i>Total</i>
	<i>Under 5</i>	<i>5-15</i>	
1949	960	25	985
1950	1,476	41	1,517
1951	1,433	43	1,476
1952	1,897	73	1,970

**REINFORCING IMMUNIZATIONS.** In those instances where the Medical Officer considers it advisable, parents are recommended to bring their children to the clinic in order that they may receive reinforcing inoculations against whooping cough. Local statistics in support of whooping cough vaccination are not available but the opinion of an experienced head mistress of a large infants' school is worthy of mention. She said, "We no longer suffer from the whooping cough epidemics which formerly ravaged the infant classes."

## (iii) Vaccination against Smallpox.

When an infant is three months old, a leaflet is sent to the parents indicating the advantages of vaccination and advising them that vaccination is undertaken by the medical practitioner.



The records available indicate that since 1949, the percentage of infants vaccinated against smallpox successfully or otherwise has steadily risen as can be seen from the following Table :

TABLE VII.

Year	Percentage of infants under one year successfully vaccinated
1949	11
1950	16
1951	24
1952	26

In parts of this County there has, for many years, been a traditional opposition to vaccination, and the percentage of infants vaccinated is considered to be unsatisfactory in view of the increasing risk of the importation of smallpox into this country associated with the greater speed of travel from the East.

The Health Committee, early in 1953, authorized smallpox vaccination to be carried out in County Council Clinics.

(iv) General Review.

The procedure outlined above has been found to work satisfactorily, and there is good co-ordination between the service provided by the Local Authority and that provided by practitioners under the Executive Council. It should be appreciated, however, that the figures stated relating to children immunized against diphtheria must of necessity be minimal, since no record is obtained in respect of those infants who are immunized privately. In conformity with general medical opinion at the time, the tendency has been for infants to be immunized at progressively earlier ages : at first it was advised that infants should be immunized when aged about ten months, but gradually the age has been reduced to five months. The success of the immunization campaign can, perhaps, best be appreciated when it is realized that only one child has suffered from diphtheria in the County since 1948 : in this instance there was no record of previous immunization. The incidence of mortality from diphtheria in the County over the past decade is contained in the following table :

TABLE VIII.

Year	Notified cases of Diphtheria amongst :				Total	Deaths assigned to Diphtheria amongst :			
	(a)		(b)			(a)		(b)	
	Immunized		Non-immunized			Immunized		Non-immunized	
	0-4	5-15	0-4	5-15		0-4	5-15	0-4	5-15
1941 and									
1942 ...	—	1	36	65	102	—	—	11	4
1943 ...	—	10	7	22	39	—	—	1	3
1944 ...	—	12	11	7	30	—	—	4	1
1945 ...	—	13	1	1	15	—	1	—	—
1946 ...	—	1	—	5	6	—	—	—	—
1947 ...	1	—	—	—	1	—	—	—	—
1948 ...	—	—	—	—	—	—	—	—	—
1949 ...	—	—	—	1	1	—	—	—	—
1950 ...	—	—	—	—	—	—	—	—	—
1951 ...	—	—	—	—	—	—	—	—	—
1952 ...	—	—	—	—	—	—	—	—	—

There has not been a death from Diphtheria in the County for the last seven years.

ADMINISTRATIVE ARRANGEMENTS. In the Health Department the administrative arrangements for vaccination and immunization are the immediate responsibility of the Deputy County Medical Officer of Health.

### 3. TUBERCULOSIS.

The Survey Report was :

On receipt of a notification, the health visitor sends a special report on the home circumstances and particular attention is paid to possible sources of infection, either (a) at home, (b) at work, or (c) from the milk supply. Contacts are urged to attend at the chest clinic and the health visitors are active in their advice regarding measures of prevention. Any housing difficulties or the need for better housing is reported and an appropriate recommendation forwarded to the District Medical Officer of Health. Some of the health visitors, as previously stated, attend the chest clinics in the county where they obtain first-hand clinical information regarding their own patients. Health visitors in the outlying areas can, however, attend clinics to see the chest physicians about any cases on which they need further advice.

The duties of the consultant chest physician include such duties under Section 28 of the National Health Service Act, 1946, in connection with the prevention of tuberculosis and the care and after-care of persons suffering from tuberculosis as may be assigned to him by the County Council or the County Medical Officer of Health. It is also the duty of the consultant chest physician to advise the County Medical Officer of Health who is in charge of the Council's scheme. The consultant chest physician carries out these duties in consultation with the staff of the Health Department, both medical and health visiting. Reports are submitted by the consultant chest physician at quarterly intervals regarding extra nourishment for patients living in areas not served by Voluntary Tuberculosis Care Committees and also about the number of contacts examined and the number of contacts vaccinated with B.C.G. Since 1st January, 1949, to the end of 1952, the number of contacts examined and the number of contacts vaccinated are as follows :

TABLE X.

<i>Year</i>	<i>Contacts examined</i>	<i>Contacts vaccinated with B.C.G.</i>
1949	463	Nil
1950	774	12
1951	874	93
1952	1,002	82

The Medical Director of the Mass Radiography Unit regularly consults with the County Medical Officer of Health regarding the programme of work to be carried out by the Unit. If, for any particular reason, it is desirable that the Unit should visit a particular place, the Medical Director is very willing to make the best arrangements possible ; for example, recently a child at school was found with pulmonary tuberculosis and within two or three weeks the school was visited by the Mass Radiography Unit to examine, with the consent of the parents, all children over ten years of age. Full reports of the results of the surveys carried out in the County by the Mass Radiography Unit are submitted to the County Medical Officer of Health by the Medical Director.

As regards care and after-care, Northamptonshire is fortunate in having thirteen voluntary committees all of which are extremely active in their welfare efforts on behalf of tuberculous patients. The functions carried out by the Care Committees include the following :

- (i) To take a kindly, sympathetic and practical interest in the welfare of all tuberculous patients in their area, and to arrange, where desired, for home visiting by the Committee.
- (ii) To collect voluntary funds required for carrying out the work of the Committee.
- (iii) To give grants of food, clothing and other necessities, and to assist in the payment of travelling expenses of patients and relatives and pocket money, provided that no monetary payment, save by way of remuneration for work performed, shall be made out of monies derived from the rates.

- (iv) To assist in adequate housing.
- (v) To assist, in co-operation with the Ministry of Labour, and otherwise if appropriate, in the finding of suitable employment where necessary.
- (vi) In conjunction with the British Legion and otherwise to render assistance in obtaining pensions for ex-service patients.
- (vii) To co-operate with the County Council in the provision of home helps.
- (viii) To assist where practicable in the continuation of handicraft work learned by patients at Sanatoria.
- (ix) To assist the County Council in health education of tuberculosis, with particular reference to the facilities for Mass Radiography provided by the Regional Hospital Board.
- (x) After consultation with the Regional Hospital Board or the appropriate management committee to arrange for visiting by members of the Committee to patients in Sanatoria.

Many of the health visitors are members of the Voluntary After-Care Committees and are consequently able to give first-hand information to the Committees to assist them in the discharge of their functions.

From time to time patients are, with the approval of the County Medical Officer of Health, sent to tuberculosis colonies for rehabilitation. Since July, 1948, only three patients have been recommended and approved by the consultant chest physician for admission to colonies. One open-air chalet has, on the recommendation of the consultant chest physician, been provided by the County Council.

Supplementary information usually included in the Annual Report is :—

The numbers of cases of tuberculosis on the registers at the end of 1952 were :

<i>Respiratory.</i>			<i>Non-Respiratory.</i>			<i>Total</i>
<i>Males.</i>	<i>Females.</i>	<i>Total.</i>	<i>Males.</i>	<i>Females.</i>	<i>Total.</i>	<i>Cases.</i>
636	521	1,157	176	171	347	1,504

Particulars of new cases of Tuberculosis and of all deaths from the disease are shown below :

AGE PERIODS.	NEW CASES.				DEATHS.			
	<i>Respiratory.</i>		<i>Non-Respiratory.</i>		<i>Respiratory.</i>		<i>Non-Respiratory.</i>	
	M.	F.	M.	F.	M.	F.	M.	F.
0— ... ..	—	—	1	1	—	—	—	—
1— ... ..	—	—	1	—	1	—	—	—
2— ... ..	1	—	—	—	—	—	—	—
5— ... ..	2	1	2	2	—	—	—	1
10— ... ..	2	4	1	—	—	—	—	—
15— ... ..	9	7	2	4	1	—	1	—
20— ... ..	11	8	1	2	—	—	—	—
25— ... ..	16	16	6	2	13	9	2	—
35— ... ..	11	8	2	3	—	—	—	—
45— ... ..	14	4	1	2	18	2	3	2
55— ... ..	6	3	1	—	7	—	—	—
65— ... ..	4	2	—	—	1	3	—	—
75— ... ..	—	3	—	—	—	—	—	—
TOTALS ...	76	56	18	16	41	14	6	3

Twenty-eight new cases were not notified in this Administrative County ; these were transfers from other areas. There was one posthumous notification.



The total primary notifications of Tuberculosis amounted to 166—87 of which occurred in the Urban Districts and 79 in the Rural Districts. Of this number, 132 were suffering from respiratory forms of the disease and 34 from other forms of tuberculosis. There was one more primary notification during 1952 than for the year 1951. Of the 166 primary notifications, 158 were civilians and 8 non-civilians ; Table III., page 73, in the statistical section, shows the number of civilian cases notified in each District.

**Mortality.** Respiratory—55 deaths (41 males and 14 females) occurred, 39 in the Urban Districts and 16 in the Rural Districts.

Other forms—Nine deaths occurred from other forms of the disease (6 males and 3 females), 6 in the Urban Districts and 3 in the Rural Districts.

There were thus 64 deaths from all forms of tuberculosis as compared with 66 in 1951. The mortality rate was 0.25 per thousand of the population, which is the lowest recorded. The rate for the combined Urban districts was 0.33 and for the combined Rural Districts 0.16.

The annual Tuberculosis Mortality Rates from the beginning of this century will be found in Table V., on page 75.

#### **Mantoux Tests.**

The results of initial Mantoux tests carried out on contacts up to 15 years of age of pulmonary tuberculosis cases diagnosed in 1952 are as follows :

<i>Age Groups</i>	<i>Urban Districts</i>		<i>Rural Districts</i>		<i>All Districts</i>	
	<i>Pos.</i>	<i>Neg.</i>	<i>Pos.</i>	<i>Neg.</i>	<i>Pos.</i>	<i>Neg.</i>
0-4	17	7	9	5	26	12
5-9	22	3	6	5	28	8
10-15	10	6	3	1	13	7

### Mass Radiography.

Details of surveys carried out in the county by the No. 1 (Northants) Mass Radiography Unit of the Oxford Regional Hospital Board are shown below :

Period of Survey.	Location of Unit and place surveyed.	Groups surveyed.	Number X-rayed.	No. of newly discovered cases of significant tuberculosis.		Percentage Response.
				Active.	Rate per 1,000.	
31st Dec.— 4th Jan., 1952.	THRAPSTON (2nd Survey)	Firms ..... General Public ..... Schools ..... Boot and Shoe (inc. above) ..... TOTAL .....	564 292 17 39 873	— — — — —		86
8th—18th Jan.	RAUNDS (2nd Survey)	Firms ..... General Public ..... Schools ..... Boot and Shoe (inc. above) ..... TOTAL .....	918 656 54 780 1,628	5 1 1 4 7	5.4 1.5 — 5.1 4.3	79
31st Mar.— 8th April	ST. CRISPIN HOSPITAL (2nd Survey)	Patients ..... Staff .....	1,305 111	4 1	3.1 9.0	
4th Feb.— 29th Mar.	NORTHAMPTON (5th Survey)	Firms ..... General Public ..... Schools ..... National Servicemen Ante-natal patients ... Boot and Shoe (inc. above) ..... TOTAL .....	18,706 6,438 2,022 734 62 5,472 27,962	38 14 2 — 1 14 55	2.0 2.2 1.0 — — 2.6 2.0	65 — 97
15th April— 21st July						
2nd Sept.	SULBY (1st Survey)	Polish Hostel .....	299	—		
6th—8th Oct.	WEEDON (2nd Survey)	War Dept. Staff ..... Firms ..... General Public ..... National Servicemen TOTAL .....	398 46 135 36 615	— — — — —		— 55
20th Oct.— 1st Nov.	DAVENTRY (2nd Survey) BOROUGH—	Firms ..... General Public ..... Schools ..... Boot and Shoe (inc. above) ..... TOTAL .....	770 662 182 268 1,614	1 3 — 1 4	1.3 4.6 — 3.7 2.5	67 — 99
	RURAL DISTRICT—	Firms ..... General Public ..... Schools ..... Boot and Shoe (inc. above) ..... TOTAL ..... National Servicemen	416 203 19 129 638 103	— — — — — —		58 — 94
		GRAND TOTAL .....	2,355	4	1.7	

### Rehabilitation—Papworth Village Settlement.

It has been arranged with Papworth Village Settlement that the Council shall be responsible for the maintenance of three patients when they reach the appropriate stage, i.e., when they are able to be employed for five hours per day.

Tuberculin Tests.

On the 22nd March, 1952, Tuberculin Jelly Patch Tests were carried out on children up to the age of 15 years living at a County Hostel. A summary of the tests is shown below. Children over the age of three years who had a positive reaction were examined at the No. 1 (Northants) Mass Radiography Unit on the 13th May, 1952, and were all found to be negative for tuberculosis.

Number tested .....	97	Number negative .....	42
Number positive .....	40	Result uncertain .....	15
(10 of these children lost the patch, so some of them may have been positive, whereas 5 of the children were not available for inspection after the test.)			

<i>Years</i>	<i>Tested</i>	<i>Positive</i>	<i>Negative</i>	<i>Lost Patch</i>	<i>Not seen after test</i>
0 - 2 .....	36 }	10 }	22 }	—	4
3 - 4 .....	30 } 66	17 } 27 (40.9%)	10 } 32 (48.5%)	3	—
5 - 6 .....	17 }	5 }	7 }	4	1
7 - 9 .....	11 } 31	7 } 13 (41.9%)	1 } 10 (32.3%)	3	—
10 - 14 .....	3 }	1 }	2 }	—	—
	97	40 (41.2%)	42 (43.3%)	10	5



## SECTION G.

### Mental Health Services

The Survey Report was :—

#### (1) ADMINISTRATION.

##### (a) Committee responsible for service.

The Committee responsible for the service is the Mental Health Services Sub-Committee of the Health Committee. The Sub-Committee consists of twelve members of the Council and three co-opted members—two nominated by the Northamptonshire Local Medical Committee and one by the Northampton Mental Hospitals Management Committee. Meetings are held quarterly.

##### (b) Staff.

###### (i) MEDICAL OFFICERS.

Dr. C. M. Smith, O.B.E., M.A., M.D., D.P.H.—County Medical Officer of Health.

Dr. M. J. Pleydell, M.C., M.D., D.P.H.—Deputy County Medical Officer of Health.

###### (ii) DULY AUTHORIZED OFFICERS AND MENTAL WELFARE OFFICERS.

Miss J. E. Minnis, B.A., Dip. Soc.

Mr. E. Towing, Cert. R.M.P.A.

Mr. S. A. Crouch.

###### (iii) OCCUPATION CENTRE SUPERVISORS.

Miss F. L. Caswell.

Miss B. V. Miller.

##### (c) Co-ordination with Regional Hospital Board and Hospital Management Committee.

Co-ordination with the hospital services is good. The County Medical Officer of Health is a member of the Northampton and of the Kettering Hospital Management Committees ; and the Deputy County Medical Officer of Health is a member of the Psychological Medicine Sub-Committee of the Joint Medical Advisory Committee of the Oxford Regional Hospital Board and of the Bromham Hospital House Committee. Further liaison with the hospital services is obtained through the Physician Superintendent and the Consultant Psychiatrists of St. Crispin Hospital who have always given their help and advice when consulted. Supervision of mental defectives on licence in the County is undertaken on behalf of the Hospital Management Committees by the Mental Welfare Officers, who also submit reports on the home circumstances of patients whom the Management Committees desire to send on holiday leave or licence.

##### (d) Duties delegated to Voluntary Associations.

No duties have been delegated to Voluntary Associations.

##### (e) Training of Staff.

One Duly Authorized Officer has attended a seven weeks' course, arranged by the National Association for Mental Health, for Mental Health Officers employed by Local Authorities. The Supervisor of the Occupation Centre and her assistant have attended refresher courses arranged by the National Association for Mental Health for staffs of Occupation Centres. The Supervisor has also visited an Occupation Centre at Cambridge.

## (2) ACCOUNT OF WORK UNDERTAKEN IN THE COMMUNITY.

### (a) Section 28 of the National Health Service Act, 1946.

#### MENTAL ILLNESS AND MENTAL DEFICIENCY—

##### PREVENTION

Since so little is known of the aetiology of many forms of mental ill-health, their prevention cannot readily be assessed or undertaken, except inasmuch as the persuasion of the patient to accept treatment at an early stage may be considered to be preventive in nature. The early detection of variations from the normal is regarded as a preventive service ; and in this respect the setting up of child guidance clinics and the lessening of the stigma previously associated with mental illness are of great value. Patients are referred to child guidance clinics either by Assistant School Medical Officers or by medical practitioners ; domiciliary visits are paid by the psychiatric social worker ; and close liaison exists between the Local Authority and practitioner services. The Local Education Authority have provided a hostel for twenty boys who are maladjusted and who require treatment. Boys from Northampton County Borough are accepted into the hostel ; and girls from the County area who require treatment are accepted in the Borough hostel which accommodates twelve maladjusted girls. The Consultant Psychiatrist is employed by both Authorities so that satisfactory co-ordination results. With regard to the hospital out-patient clinics, however, patients are referred direct by the medical practitioners ; mental health workers are seldom asked to visit ; and there is scant co-ordination between the three services involved. Nevertheless, district nurses and health visitors may well be the first to notice the early signs of mental illness and so bring about early treatment ; and inasmuch as they sometimes visit the home during the patient's absence and after her return, it may be said that they undertake preventive mental health work.

The part played by adverse social and environmental factors in the production of emotional and mental ill-health is fully appreciated, and every effort is made to reduce predisposing domiciliary conditions to a minimum. In this respect preventive work is undertaken by the Local Sanitary Authorities in the County through their vigorous housing schemes and the priority given in the allocation of houses to the most necessitous cases. Here, too, there is close co-operation between the medical practitioner, the nursing services of the Local Health Authority, and the Local Sanitary Authority.

It is recognized that children who are mentally unstable and who are also educationally sub-normal are liable to deteriorate in adult life and become subject to Court jurisdiction. Sound training in early life may do much to abrogate the unfortunate domiciliary environment which is so frequently present ; and the setting up of a special boarding school for sixty educationally sub-normal pupils at Loddington should provide a valuable reinforcement to the preventive service. It is realized, however, that there is no provision for the backward child who is also seriously maladjusted. Such a child falls between two stools : he is unacceptable to the child guidance clinic since he is not sufficiently intelligent to benefit from treatment ; he is unacceptable to a special school since he is not amenable to discipline. This hiatus between the services is one of the most serious shortcomings in the present Mental Health Service. It is suggested that the gap could be bridged if certain institutions were set apart to undertake the study and sole care of these children by psychiatrists with special experience in mental deficiency and child guidance problems. These institutions should be provided with full educational facilities.

With regard to mental defect, the careful supervision of all cases—particular care being paid to those living in the worst circumstances—may be regarded from a preventive aspect. It has always been considered especially important that female patients living under conditions of moral danger should be protected and, if necessary, placed under institutional care, before pregnancy occurs. The requisite supervision to prevent such patients from becoming pregnant must, indeed, be considered the primary preventive measure. In these instances very gratifying co-operation has been received from the Regional Hospital Board who have been most helpful in providing immediate vacancies for the most urgent cases.



## CARE.

With the approval of the Minister of Health, the Council has added the following paragraph to their original proposals :

“ The Authority will provide for the temporary boarding-out of mental defectives removed from their homes in an emergency during any period of special need, such period not normally to exceed two months, and where appropriate will pay the whole or part of the cost of their maintenance during that period.”

None of the defectives removed temporarily from their homes has been suitable for boarding-out.

The number of cases of senile dementia gives cause for concern, and it is regrettable that these cases may have to be certified, solely in order to obtain a bed. This is not due, however, to lack of co-ordination between the different departments of the Local Authority but to lack of alternative accommodation for old people who are becoming a little confused. It is estimated that in twenty-five years time the ratio of persons over working age to those of working age will be doubled ; the problem of their mental welfare will increase in like proportion.

The supervision of mental defectives is ensured by regular visiting by the health visitors. An occupation centre in Kettering provides training for high grade imbeciles, and relieves parents of a burden which at times becomes almost intolerable. Some of the defectives from the occupation centre can be trained to become employable under supervision ; and in all instances where employment is required for a defective, there is close co-operation with the Youth Employment Officer, the Labour Exchange, and directly with employers.

The lack of institutional accommodation for defectives is a national rather than a local problem. Many cases in this County are in great need of institutional care, but, as a general rule, it is only when conditions become critical that a vacancy can be obtained.

## AFTER-CARE.

The community care of mental patients is undertaken by the officers of the Local Health Authority upon the receipt of notification from the Hospital Management Committees or the Regional Hospital Board. No action is taken in respect of patients discharged from hospital who, in the opinion of the Consultant Psychiatrist concerned, do not require after-care or who are unwilling to receive such care. It is felt that more could be done in regard to the latter group ; that many such patients might well be visited without incurring resentment ; and that helpful supervision might well prevent relapse. Again, patients who have attended for out-patient treatment should, it is felt, be visited for the same reason. It is not surprising that few patients volunteer to receive domiciliary visits after discharge from hospital, but in so important a matter involving both prevention and after-care it would be better if the patient was advised that such visits formed part of the treatment. In this respect there is lack of co-ordination between the therapeutic care provided by the hospital services, and the preventive and after-care services of the Local Authority. In these times, when so many patients enter hospital in a voluntary or temporary capacity, and when the stigma associated with mental illness is so diminished, such co-ordination should be an inherent factor in their welfare. The care of patients should merge naturally into their after-care.

## MENTAL DEFICIENCY—CARE AND AFTER-CARE.

Here there is close liaison with the hospital services. Domiciliary visits are paid, and reports on home circumstances sent to the hospitals before patients are released on licence. Regular supervision of defectives on licence is undertaken on behalf of the Hospital Management Committees, and there is also close co-ordination with other Health Authorities if mental defectives from their area are under guardianship in this County.

## (b) Lunacy and Mental Treatments Acts, 1890-1930.

In consultation with the Physician Superintendent of St. Crispin Hospital every endeavour is made to ensure that the best method of dealing with each patient is followed. The admission



of voluntary patients has been encouraged, and Justices have made use of Section 21 of the Lunacy Act, 1890 (14 day Order), in preference to certification in the first instance. The closest co-operation has been maintained between the Officers of the Mental Hospital, the general medical practitioners, the Duly Authorized Officers and the Ambulance Service.

(c) **Mental Deficiency Acts, 1913-1938.**

(i) ASCERTAINMENT AND SUPERVISION.

Cases of alleged mental defectiveness reported to the Department are investigated by the Mental Welfare Officers and, where applicable, after examination by a Medical Officer, are reported to the Mental Health Services Sub-Committee for ascertainment. As noted previously, health visitors make routine domiciliary visits to mental defectives living in satisfactory homes whose conduct is not markedly antisocial. Patients on licence in the County receive regular visits from the Mental Welfare Officers who also undertake the supervision of special or difficult cases.

(ii) GUARDIANSHIP.

The Deputy County Medical Officer of Health and the Mental Welfare Officers pay regular visits to defectives under guardianship. Two County patients are in the care of guardians at Brighton and have been supervised by The Guardianship Society, Hove.

(iii) TRAINING.

An Occupation Centre has been established at Kettering for some twenty pupils, the majority of whom are active imbeciles. The usual Centre training is undertaken, and in addition handicrafts are taught to those defectives over sixteen years of age. By arrangement with the Northampton County Borough Council two County patients have attended that Council's Handicraft Centre.

The question of establishing a Centre at Wellingborough is at present under review by the Council.

Supplementary information usually included in the Annual Report is :—

**Lunacy and Mental Treatment Acts, 1890-1930.**

Cases dealt with by Duly Authorized Officers :

	<i>Males</i>	<i>Females</i>	<i>Total</i>
No. of cases certified and removed to hospital .....	13	13	26
No. of cases removed on Three Day Orders and subsequently			
(a) Certified .....	8	7	15
(b) Admitted as Temporary Patients .....	4	4	8
(c) Admitted as Voluntary Patients .....	16	23	39
(d) Orders extended by Physician Superintendent and then discharged .....	5	3	8
(e) Discharged .....	1	—	1
(f) Died .....	1	—	1
No. of cases removed on Justices' Orders (14 days) and subsequently			
(a) Certified .....	4	11	15
(b) Admitted as Temporary Patients .....	1	4	5
(c) Admitted as Voluntary Patients .....	9	15	24
(d) Orders extended by Physician Superintendent and then discharged .....	2	5	7
(e) Discharged .....	3	4	7
(f) Died .....	2	—	2
No. of cases admitted direct as Temporary Patients .....	—	1	1
No. of cases admitted direct as Voluntary Patients .....	9	4	13
No. of cases in which no action was necessary .....	18	33	51
 Total number of cases referred .....	 96	 127	 223

The numbers of admissions to Mental Hospitals as Health Service Patients from the County were as follows :

	<i>Males</i>	<i>Females</i>	<i>Total</i>
Voluntary Patients .....	106	143	249
Temporary Patients .....	5	9	14
Certified Patients .....	25	31	56
Under Orders for observation .....	14	12	26
	150	195	345

### Mental Deficiency Acts, 1913-1938.

Cases on the Register :

IN CERTIFIED INSTITUTIONS :	<i>Males</i>	<i>Females</i>	<i>Total</i>
Bromham Hospital, near Bedford .....	36	41	77
Pewsey Hospital, Pewsey, Wilts .....	30	4	34
Borocourt, near Reading .....	13	11	24
Stoke Park Colony, Stapleton, Bristol .....	12	6	18
The Manor House, Aylesbury .....	8	9	17
Park Hospital, Wellingborough .....	10	7	17
St. Mary's Hospital, Kettering .....	6	9	15
Rampton Hospital, Retford, Notts .....	7	4	11
Brentry Colony, Westbury-on-Trym, Bristol .....	7	—	7
Whittington Hall, Chesterfield .....	—	6	6
Leavesden Hospital, Abbots Langley .....	1	3	4
Royal Earlswood Institution, Redhill, Surrey .....	2	1	3
Lisieux Hall, Whittle-le-Woods, Lancs .....	2	—	2
Coleshill Hospital, near Birmingham .....	1	—	1
Hortham Colony, Almondsbury, near Bristol .....	1	—	1
The Manor Hospital, Derby .....	—	1	1
Rock Hall House, Combe Down, Bath .....	1	—	1
St. Joseph's Home, Howard Hill, Sheffield .....	—	1	1
Brandesburton Hall, near Driffield, Yorks .....	1	—	1
Weston Colony, Weston-under-Weatherley .....	—	1	1
	138	104	242
On licence from institutions .....	5	5	10
Cases under Guardianship .....	4	2	6
	147	111	258
IN APPROVED HOMES :			
Mount Tabor, Wingrave, Bucks .....	—	4	4
Purley Park, Reading .....	2	—	2
Under statutory supervision .....	108	90	198
Under voluntary supervision .....	58	53	111
Cases otherwise " ascertained " .....	11	19	30
	326	277	603

Ascertainment Rate : 2.33 per 1,000.

### Ascertainment.

Of seventy cases reported, sixty-eight were ascertained as mental defectives. Twenty-three were ascertained directly by the Health Department, thirteen were reported by the Education Authority, twenty by the Physician Superintendent of St. Crispin Hospital, Duston, two by other Hospitals, three as transfers from other Local Authorities, two by the Ministry of Labour and National Service, and the remainder through the Courts, County Welfare Department, Children's Department, Youth Employment and the National Assistance Board. Fourteen cases were removed from the Register during the year—eight patients died, three removed from the area, one was found no longer to be mentally defective, one was certified under the Lunacy Act, and one patient on licence from an institution was discharged from the Order.



### **Guardianship.**

The Mental Welfare Officers paid regular visits to the four defectives under Guardianship in the County. During the year one patient died, another was admitted to an institution and one was transferred to the County from another Local Authority. Two patients in the care of guardians at Brighton were supervised by The Guardianship Society, Hove, and from the Society's bi-monthly reports it appears that these patients are happy and well cared for.

### **Licence.**

Fifteen patients (7 males, 8 females), including five new cases, were on licence from institutions. Six female patients were in domestic service, one worked in a boot and shoe factory and another in a laundry. All male patients on licence were employed as labourers. One male and two female patients on licence were discharged from their Orders under the Act, and the licences in respect of one male and one female were withdrawn. All patients on licence in the County received regular visits from the Mental Welfare Officers.

### **Medical Examinations.**

Medical Officers carried out 101 special examinations.

### **Domiciliary Supervision.**

The Health Visitors made 839 routine visits to defectives under statutory and voluntary supervision in their homes. The Mental Welfare Officers carried out 989 visits and interviews. These visits are generally welcomed, and parents are eager to discuss problems and difficulties associated with mental retardation.

### **Institutional Care.**

Forty-three patients were admitted under Orders to certified institutions to vacancies allocated by the Regional Hospital Board. All the Orders were obtained upon petition with the exception of one made by the Court and one by the Secretary of State. In addition, one patient was admitted to an Approved Home, one defective was placed by her parent in an institution under section 3 of the Mental Deficiency Act, 1913, and two patients were placed in certified institutions for temporary periods of one month. One case under statutory supervision was admitted to St. Crispin Hospital as a certified patient under the Lunacy Act, 1890. Five patients were transferred from one institution to another. The number of cases awaiting admission at the end of the year was forty-two (24 males and 18 females) of which twenty-five were in urgent need of institutional care. The shortage of accommodation for mental defectives who are in urgent need of institutional care is one of the most serious deficiencies of the present health service, yet despite the difficulties the officers of the Regional Hospital Board do their utmost to obtain immediate vacancies for the most urgent cases.

### **Training.**

The Occupation Centre at Kettering provides for mentally defective persons, the majority of whom are children excluded from school under section 57 of the Education Act, 1944, as being incapable of receiving education at school. Chronological age is not the determining factor for attendance at the Centre, and two working groups have been set up, one for junior and the other for senior pupils. The object of the Centre is to develop the minds of these pupils as far as possible and so help them to form good habits, acquire self-control, and develop a social sense in community life. By this instruction the parents are relieved of the very great strain caused by the presence of an untrained defective in the family, and they are encouraged by seeing the changes which can be brought about.

At the end of the year there were twenty-three mental defectives on the register. One girl left and was admitted to Manor House, Aylesbury, and one boy aged seventeen started work on a farm in September. Another boy improved so markedly under the individual care and instruction given by the supervisors that he was able to return to his local school; this illustrates a further useful purpose served by the Centre. During the year five new children attended the



Centre, four of them being seven years of age ; they travelled by bus from their homes in Rushden, Higham Ferrers and Finedon. Children also attend the Centre from Corby, Walgrave and the Wellingborough area.

The parents of defectives attending the Centre benefit greatly by meeting each other and discussing the common problems and difficulties with which they are faced. Special meetings are held four times a year and at the end of each term, but interested mothers can always meet every Friday. In July a special outing was arranged when most of the children and some of the mothers spent an enjoyable day by the sea at Skegness.

Every year a medical and dental examination of the pupils is made at which the mothers attend. No particular defects were discovered this year, but poor physique and posture are not uncommon amongst these children. When the air raid shelter outside the Centre has been demolished it is hoped that the extra space available will allow more opportunity for physical training and recreation.

A party was held in the week before Christmas to which the mothers of the children were invited. The articles completed by the children—rugs, stools, raffia mats, scarves, etc., were on display and most of them were subsequently purchased.

During the year equipment was transferred to the Centre from the Linden Avenue Day Nursery after its closure ; and, acting on the recommendation of Miss Curzon, Inspector of the Board of Control, more equipment for sensory training was obtained. Particular attention, too, has been paid to speech training. Miss Dentith, the Speech Therapist, has visited the Centre on several occasions, examined each child, and given advice to the supervisors regarding the best method of individual training applicable. In some cases where she considered it necessary, she has given the initial training herself. Clarity of speech presents great difficulties to a defective child, and there is no doubt that this form of training is very profitable.

### (iii) **AMBULANCE SERVICE.**

Use is made of the local authority's ambulance service to transport patients dealt with under the Lunacy and Mental Treatment Acts. In the cases of patients dealt with under the Mental Deficiency Acts it has been found, as a rule, more convenient for the Officers to use their own cars for transport.

### (iv) **GENERAL.**

It is gratifying to be able to record that many more patients are to-day entering mental hospitals of their own free will, whereas in the past they had to be legally certified as being of unsound mind. Voluntary patients are able to discharge themselves from hospital when they desire and in this way there has been a considerable reduction of the stigma previously associated with mental illness. The Duly Authorized Officers endeavour to persuade patients to enter hospitals voluntarily whenever possible and the following figures provide a fitting reflection on this aspect of their work.

	<i>Percentage of Patients admitted in a voluntary capacity</i>	<i>Percentage of Patients certified prior to admission</i>
1950 .....	20%	73%
1951 .....	27%	59%
1952 .....	43%	33%

CAUSES OF DEATH IN ADMINISTRATIVE AREAS—URBAN DISTRICTS.

TABLE I. (a)

CAUSES OF DEATH	Brackley		Burton Latimer		Corby		Daventry		Desboro'		Higham Ferrers		Irlingham-borough		Kettering		Oundle		Raunds		Rothwell		Rushden		Welling-borough		Aggregate of U.D.s.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
ALL CAUSES	14	16	19	17	47	43	92	92	28	22	16	16	32	26	200	188	17	13	37	38	26	21	97	107	165	169	790	768
1 Tuberculosis, respiratory	1	1	...	...	2	...	1	...	1	...	1	...	1	...	11	3	1	...	1	...	3	...	5	3	3	...	29	10
2 Tuberculosis, other	...	...	...	...	1	1	...	...	...	...	...	...	1	...	1	...	...	...	...	...	...	...	...	1	...	...	4	2
3 Syphilitic disease	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3	4	
4 Diphtheria	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
5 Whooping Cough	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
6 Meningococcal infections	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
7 Acute Poliomyelitis	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
8 Measles	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
9 Other infective and parasitic diseases	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
10 Malignant neoplasm, stomach	...	1	1	...	5	...	2	...	...	...	...	...	1	...	7	2	...	1	...	...	...	...	...	...	...	...	...	...
11 Malignant neoplasm, lung, bronchus	...	...	...	...	1	...	3	...	1	...	...	...	2	...	9	2	...	...	...	...	...	...	...	...	...	...	...	...
12 Malignant neoplasm, breast	...	2	...	1	...	1	...	...	...	...	...	...	...	...	...	5	...	...	...	...	...	...	...	...	...	...	...	...
13 Malignant neoplasm, uterus	...	1	...	1	...	...	2	...	...	...	...	...	...	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...
14 Other malignant & lymphatic neoplasms	2	...	3	3	2	3	4	...	7	4	1	...	2	...	11	25	...	...	...	...	...	...	...	...	...	...	...	...
15 Leukaemia, aleukaemia	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
16 Diabetes	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
17 Vascular lesions of nervous system	2	6	3	1	3	8	19	17	5	4	1	2	5	6	25	24	...	5	7	...	...	...	...	...	...	...	...	...
18 Coronary disease, angina	1	1	5	2	5	2	2	6	5	5	3	1	2	1	37	23	...	1	6	...	...	...	...	...	...	...	...	...
19 Hypertension with heart disease	...	...	...	...	1	1	...	...	...	...	...	...	...	...	2	7	...	...	...	...	...	...	...	...	...	...	...	...
20 Other heart disease	...	1	1	5	3	9	42	42	...	4	7	...	7	7	39	42	...	4	5	...	...	...	...	...	...	...	...	...
21 Other circulatory disease	...	1	1	...	...	1	5	4	1	2	...	...	1	...	4	5	...	...	...	...	...	...	...	...	...	...	...	...
22 Influenza	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
23 Pneumonia	...	...	1	1	3	1	1	4	...	...	...	...	...	...	...	11	...	...	...	...	...	...	...	...	...	...	...	...
24 Bronchitis	3	1	3	...	3	2	6	7	3	...	...	...	4	2	9	11	...	1	...	...	...	...	...	...	...	...	...	...
25 Other diseases of respiratory system	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
26 Ulcer of stomach and duodenum	1	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
27 Gastritis, enteritis and diarrhoea	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
28 Nephritis and nephrosis	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
29 Hyperplasia of prostate	1	...	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
30 Pregnancy, childbirth, abortion	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
31 Congenital malformations	...	...	...	...	1	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
32 Other defined and ill-defined diseases	...	...	...	...	7	7	3	2	2	...	...	...	3	1	15	18	...	5	...	...	...	...	...	...	...	...	...	...
33 Motor vehicle accidents	2	...	...	...	1	1	2	1	1	...	...	...	...	...	2	3	...	...	...	...	...	...	...	...	...	...	...	...
34 All other accidents	...	1	...	1	4	2	1	1	...	...	...	...	...	...	6	3	...	...	...	...	...	...	...	...	...	...	...	...
35 Suicide	...	...	...	...	2	1	...	...	1	...	...	...	1	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...
36 Homicide and operations of war	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Deaths of Infants under 1 year	1	...	...	...	7	8	3	...	...	...	...	...	...	...	11	5	...	...	2	...	...	...	...	...	...	...	...	...
Deaths of Infants under 4 weeks of age	1	...	...	...	6	4	3	...	...	...	...	...	...	...	10	4	...	...	2	...	...	...	...	...	...	...	...	...
Live Births	30	15	33	33	219	230	46	28	21	28	30	35	35	39	262	238	28	17	26	29	22	36	100	100	248	186	1100	1014
	30	15	32	30	207	220	46	28	21	27	30	34	35	36	248	224	26	16	23	28	22	35	94	96	236	183	1050	972
	...	...	1	...	12	10	...	...	...	1	...	...	...	3	14	14	2	1	3	1	...	1	6	4	12	3	50	42
Still Births	3	...	...	...	7	4	...	1	2	...	3	...	...	...	9	4	...	...	3	2	4	...	1	1	4	2	36	16
	3	...	...	...	6	2	...	1	2	...	3	...	...	...	9	4	...	...	3	2	4	...	1	1	4	2	35	14
	...	...	1	...	1	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	2
Estimated mid-year Home Population	2,869	4,194	18,050	4,100	4,883	3,661	4,996	36,600	3,077	4,521	4,649	16,250	28,250	136,100	1,03	1.08	1.06	1.56	1.08	1.08	1.06	1.08	1.08	1.08	1.08	1.08	1.08	1.08
Comparability Factors	1.22	0.95	0.98	1.06	1.00	0.99	1.02	1.03	1.56	1.08	1.06	1.08	1.08	1.08	1.03	1.08	1.06	1.56	1.08	1.08	1.06	1.08	1.08	1.08	1.08	1.08	1.08	1.08
Births	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Deaths	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...



CAUSES OF DEATH IN ADMINISTRATIVE AREAS—RURAL DISTRICTS.

TABLE I. (b)

CAUSES OF DEATH.			Brackley R.D.		Brixworth R.D.		Daventry R.D.		Kettering R.D.		Northampton R.D.		Oundle and Thrapston R.D.		Towcester R.D.		Welling- borough R.D.		Aggregate of R.Ds.		
			M. 61	F. 31	M. 74	F. 82	M. 104	F. 78	M. 62	F. 68	M. 100	F. 87	M. 108	F. 95	M. 85	F. 86	M. 92	F. 82	M. 686	F. 609	
ALL CAUSES .....			...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
1 Tuberculosis, respiratory .....			...	1	2	...	...	2	...	...	3	1	4	...	...	...	3	...	12	4	
2 Tuberculosis, other .....			...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	1	2	1	
3 Syphilitic disease.....			...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1	...	
4 Diphtheria .....			...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
5 Whooping Cough.....			...	...	1	...	...	...	...	1	...	...	...	...	...	...	...	...	1	1	
6 Meningococcal infections .....			...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
7 Acute Poliomyelitis .....			1	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	2	...	
8 Measles .....			...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	1	
9 Other infective and parasitic diseases .....			...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	1	1	
10 Malignant neoplasm, stomach .....			2	...	1	...	...	4	1	2	3	...	6	3	3	1	1	2	17	12	
11 Malignant neoplasm, lung, bronchus .....			2	...	2	...	7	...	1	...	2	...	...	...	4	...	...	...	18	...	
12 Malignant neoplasm, breast .....			...	1	...	4	...	5	...	5	...	2	...	2	...	2	...	3	...	24	
13 Malignant neoplasm, uterus .....			...	...	...	3	...	1	...	1	...	2	...	1	...	1	...	1	...	10	
14 Other malignant & lymphatic neoplasms .....			5	1	3	9	10	7	7	5	10	6	11	10	7	4	8	9	61	51	
15 Leukaemia, aleukaemia .....			...	...	...	...	...	...	...	1	...	...	1	...	...	...	...	...	1	1	
16 Diabetes .....			...	2	...	...	1	1	...	...	...	1	...	3	...	1	1	...	2	8	
17 Vascular lesions of nervous system .....			8	6	11	23	13	14	10	11	8	12	15	16	16	20	7	12	88	114	
18 Coronary disease, angina .....			9	2	13	8	18	8	7	4	14	10	9	2	5	13	16	13	91	60	
19 Hypertension with heart disease...			2	...	2	1	3	1	1	1	3	5	...	2	1	1	3	1	15	12	
20 Other heart disease .....			11	6	12	17	23	17	10	17	14	21	23	32	13	17	22	25	128	152	
21 Other circulatory disease .....			...	...	4	2	6	4	2	2	7	5	2	1	1	1	1	1	23	16	
22 Influenza .....			...	...	...	...	1	...	1	1	2	...	...	...	...	1	1	...	2	5	
23 Pneumonia .....			2	...	4	1	3	...	3	3	3	1	1	2	5	6	5	1	26	14	
24 Bronchitis.....			2	3	2	3	4	3	5	1	5	4	6	4	5	5	1	2	30	25	
25 Other diseases of respiratory system .....			1	1	...	1	1	...	...	...	...	1	...	1	...	...	...	...	2	4	
26 Ulcer of stomach and duodenum...			2	...	1	...	2	...	2	1	...	1	1	1	3	...	...	...	11	3	
27 Gastritis, enteritis and diarrhoea...			1	...	...	...	...	2	...	...	...	...	...	...	...	...	...	...	1	2	
28 Nephritis and nephrosis .....			1	1	1	1	...	...	2	2	4	1	1	2	...	1	4	2	13	10	
29 Hyperplasia of prostate .....			...	...	1	...	3	...	1	...	4	...	4	...	2	...	3	...	18	...	
30 Pregnancy, childbirth, abortion .....			...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
31 Congenital malformations .....			...	...	1	...	1	1	...	2	1	2	1	1	...	1	...	...	4	7	
32 Other defined and ill-defined diseases .....			7	6	8	6	5	5	6	6	10	8	16	11	9	10	11	6	72	58	
33 Motor vehicle accidents .....			2	...	3	...	2	...	1	...	2	1	1	1	1	...	1	...	13	2	
34 All other accidents .....			3	1	1	3	1	1	3	2	5	1	4	...	6	1	...	2	23	11	
35 Suicide .....			...	...	1	...	1	...	...	...	1	...	1	...	3	...	1	...	8	...	
36 Homicide and operations of war ...			...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
Deaths of Infants under 1 year { Total ...			...	1	3	5	1	5	2	3	3	4	5	6	2	4	3	2	1	30	20
Deaths of Infants under 1 year { Legitimate ...			...	1	3	5	1	5	1	2	3	4	5	4	2	4	2	2	1	27	18
Deaths of Infants under 1 year { Illegitimate ...			...	...	...	...	...	1	1	...	...	...	2	...	...	1	...	...	3	2	
Deaths of Infants under 4 weeks of age { Total ...			...	...	3	4	...	5	2	3	1	3	3	3	2	2	2	1	22	14	
Deaths of Infants under 4 weeks of age { Legitimate ...			...	...	3	4	...	5	1	2	1	3	3	2	2	2	1	2	1	20	12
Deaths of Infants under 4 weeks of age { Illegitimate ...			...	...	...	...	...	1	1	...	...	...	1	...	...	1	...	...	2	2	
Live Births { Total ...			...	94	92	143	120	136	100	104	90	166	136	163	138	110	109	101	90	1017	875
Live Births { Legitimate ...			...	88	87	141	115	131	95	98	88	161	131	154	135	98	105	98	84	969	840
Live Births { Illegitimate ...			...	6	5	2	5	5	6	2	5	5	9	3	12	4	3	6	48	35	
Still Births { Total ...			...	...	...	1	2	2	3	...	1	2	5	4	4	1	5	...	2	10	22
Still Births { Legitimate ...			...	...	...	1	2	2	3	...	1	1	5	4	3	1	5	...	2	9	21
Still Births { Illegitimate ...			...	...	...	...	...	...	...	...	1	...	...	...	1	...	...	...	1	1	
Estimated mid-year Home Population			10,220		17,840		16,440		12,140		19,970		18,300		14,490		13,000		122,400		
Comparability Factors Births ...			1.11		1.05		1.10		1.19		1.11		1.11		1.12		1.08		1.10		
Comparability Factors Deaths ...			0.83		0.81		0.82		0.98		0.84		0.87		0.85		0.83		0.85		



TABLE II.

## CAUSES OF DEATH AT DIFFERENT PERIODS OF LIFE IN THE ADMINISTRATIVE COUNTY OF NORTHAMPTON.

CAUSES OF DEATH		Sex	AGGREGATE OF URBAN DISTRICTS										AGGREGATE OF RURAL DISTRICTS							
			All Ages	0—	1—	5—	15—	25—	45—	65—	75—	All Ages	0—	1—	5—	15—	25—	45—	65—	75—
1	Tuberculosis, respiratory .....	M. F.	29 10	...	1	...	1	8 6	14 1	4 ...	1 3	12 4	...	...	...	5 3	4 1	3 ...	...	...
2	Tuberculosis, other .....	M. F.	4 2	...	...	1	2	2 1	...	...	...	2 1	...	...	...	...	1 1	...	...	...
3	Syphilitic disease.....	M. F.	3 4	...	...	...	...	...	...	3 3	...	1 ...	...	...	...	1 ...	...	...	...	...
4	Diphtheria .....	M. F.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
5	Whooping Cough.....	M. F.	...	...	...	...	...	...	...	...	...	1 1	...	...	...	...	...	...	...	...
6	Meningococcal infections .....	M. F.	1 ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
7	Acute Poliomyelitis .....	M. F.	...	...	...	...	...	...	...	...	...	2 ...	...	...	...	2 ...	...	...	...	...
8	Measles .....	M. F.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
9	Other infective and parasitic diseases .....	M. F.	1 1	...	...	...	...	1	...	...	...	1 1	...	...	...	1 ...	...	...	...	...
10	Malignant neoplasm, stomach ...	M. F.	26 14	...	...	...	...	1	7 3	7 7	11 4	17 12	...	...	...	...	6 5	5 2	6 5	...
11	Malignant neoplasm, lung, bronchus .....	M. F.	31 3	...	...	...	2	18	...	7 1	4 2	18	...	...	...	1 ...	...	3 ...	...	...
12	Malignant neoplasm, breast .....	M. F.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
13	Malignant neoplasm, uterus .....	M. F.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
14	Other malignant and lymphatic neoplasms .....	M. F.	63 70	...	...	1 1	5 7	21 25	13 23	21 11	21 11	61 51	...	2 ...	...	...	...	...	...	...
15	Leukaemia, aleukaemia .....	M. F.	4 2	...	1	...	...	1 1	...	1 ...	1 ...	1 1	...	1 ...	...	...	...	...	...	...
16	Diabetes .....	M. F.	5 8	...	...	...	...	...	2 2	2 3	1 3	2 8	...	...	...	...	...	...	...	...
17	Vascular Lesions of nervous system.....	M. F.	111 132	...	...	...	...	4 2	14 23	35 41	58 66	88 114	...	...	...	...	...	...	...	...
18	Coronary disease, angina .....	M. F.	107 84	...	...	...	2 1	38 12	32 30	35 41	35 41	91 60	...	...	...	1 1	15 9	38 24	37 26	...
19	Hypertension with heart disease	M. F.	9 13	...	...	...	...	...	3 3	3 6	3 4	15 12	...	...	...	1 ...	6 4	3 2	5 6	...

CAUSES OF DEATH		Sex	AGGREGATE OF URBAN DISTRICTS									AGGREGATE OF RURAL DISTRICTS								
			All ages	0—	1—	5—	15—	25—	45—	65—	75—	All Ages	0—	1—	5—	15—	25—	45—	65—	75—
20 Other heart disease .....		M. F.	158 193	... ...	... ...	... ...	... ...	2 3	17 15	35 29	104 146	128 152	... ...	... ...	... ...	1 4	12 12	31 36	84 100	
21 Other circulatory disease .....		M. F.	20 27	... ...	... ...	... ...	... ...	1 ...	... 4	4 5	15 18	23 16	... ...	... ...	1 ...	... ...	5 ...	6 4	11 12	
22 Influenza .....		M. F.	3 5	... ...	... ...	... ...	... ...	... ...	... 1	1 4	2 ...	2 5	... ...	... ...	... ...	... ...	... 2	1 1	1 2	
23 Pneumonia .....		M. F.	23 29	1 3	1 ...	... ...	... ...	1 2	7 3	2 8	11 13	26 14	4 1	2 1	1 1	... ...	4 1	3 3	11 6	
24 Bronchitis.....		M. F.	54 21	... 2	... ...	... ...	... ...	... 1	13 ...	17 4	24 14	30 25	1 1	... ...	... ...	... ...	5 ...	11 6	13 18	
25 Other diseases of respiratory system.....		M. F.	5 4	... ...	... ...	... ...	... ...	... 1	... ...	5 1	... 1	2 4	... ...	... ...	... ...	1 ...	... ...	... 1	1 2	
26 Ulcer of stomach and duodenum		M. F.	11 1	... ...	... ...	... ...	... ...	... ...	5 ...	2 ...	4 1	11 3	... ...	... ...	... ...	1 ...	3 ...	4 2	3 1	
27 Gastritis, enteritis and diarrhoea		M. F.	... 2	... ...	... ...	... ...	... ...	... ...	... 1	... ...	... 1	1 2	... ...	... ...	... ...	... ...	... ...	... 1	1 1	
28 Nephritis and nephrosis .....		M. F.	7 3	... ...	... ...	... ...	1 ...	... ...	... 1	2 2	4 ...	13 10	... ...	... ...	... ...	2 ...	4 2	1 2	4 5	
29 Hyperplasia of prostate .....		M. F.	13 ...	... ...	... ...	... ...	... ...	... ...	... ...	4 ...	9 ...	18 ...	... ...	... ...	... ...	... ...	1 ...	... ...	17 ...	
30 Pregnancy, childbirth, abortion		M. F.	... 1	... ...	... ...	... ...	... ...	... 1	... ...	... ...	... ...	... ...	... ...	... ...	... ...	... ...	... ...	... ...	... ...	
31 Congenital Malformations		M. F.	7 5	6 2	... 2	... ...	... ...	... ...	1 1	... ...	... ...	4 7	3 5	... ...	... 2	1 ...	... ...	... ...	... ...	
32 Other defined and ill-defined diseases .....		M. F.	57 70	23 11	1 2	... 1	... ...	1 4	7 10	9 11	15 31	72 58	20 12	1 ...	... ...	1 1	5 3	13 11	25 18	
33 Motor vehicle accidents.....		M. F.	11 2	... ...	1 1	4 ...	1 ...	2 ...	2 ...	... 1	1 ...	13 2	... ...	... ...	... 1	3 ...	4 ...	1 ...	... ...	
34 All other accidents .....		M. F.	19 14	1 1	... 1	... ...	4 ...	4 1	1 1	6 1	3 9	23 11	1 ...	1 2	2 1	2 ...	5 3	8 3	2 2	
35 Suicide .....		M. F.	8 6	... ...	... ...	... ...	1 ...	2 1	3 3	... 1	2 1	8 ...	... ...	... ...	... ...	1 ...	5 ...	1 ...	... ...	
36 Homicide and operations of war		M. F.	... ...	... ...	... ...	... ...	... ...	... ...	... ...	... ...	... ...	... ...	... ...	... ...	... ...	... ...	... ...	... ...	... ...	
ALL CAUSES .....		M. F.	790 768	31 19	6 9	6 3	10 2	37 35	177 129	194 193	329 378	686 609	30 20	7 3	4 6	16 3	27 14	139 113	177 159	286 291

TABLE No. II(a)

CAUSES OF DEATHS OF CHILDREN UNDER ONE YEAR—1952

Cause of Death	Age in Weeks					Total
	—1	—2	—3	—4	5-52	
Whooping Cough .....	—	—	—	—	1	1
Tuberculous diseases .....	—	—	—	—	—	—
Measles .....	—	—	—	—	—	—
Convulsions .....	—	—	—	—	—	—
Bronchitis and Pneumonia .....	3	—	1	—	10	14
Enteritis and Diarrhoea .....	—	—	—	—	—	—
Congenital Malformations .....	9	1	—	1	4	15
Premature Birth .....	17	1	—	—	1	19
Injury at birth .....	3	—	—	—	—	3
Asphyxia and Atelectasis .....	30	—	1	—	4	35
Congenital Debility .....	—	—	—	—	—	—
Haemolytic Disease .....	5	1	—	—	—	6
Other Causes .....	5	—	—	—	2	7
TOTALS .....	72	3	2	1	22	100

TABLE II(b)

BIRTH RATES, CIVILIAN DEATH RATES, ANALYSIS OF MORTALITY AND CASE RATES FOR CERTAIN INFECTIOUS DISEASES FOR NORTHAMPTONSHIRE AND ENGLAND AND WALES, 1952.

	England and Wales	Northamptonshire
<b>Births :</b>		
Live .....	15.30	15.50
Still .....	0.35	0.33
<b>Deaths :</b>		
All Causes .....	11.30	11.04
Typhoid and paratyphoid .....	0.00	0.00
Whooping Cough .....	0.00	0.01
Diphtheria .....	0.00	0.00
Tuberculosis .....	0.24	0.25
Influenza .....	0.04	0.05
Smallpox .....	0.00	0.00
Acute Poliomyelitis (including Polio-encephalitis) .....	0.01	0.01
Pneumonia .....	0.47	0.36
<b>Notifications (Corrected) :</b>		
Typhoid Fever .....	0.00	0.00
Paratyphoid fever .....	0.02	0.04
Meningococcal infection .....	0.03	0.01
Scarlet Fever... ..	1.53	1.15
Whooping Cough .....	2.61	2.38
Diphtheria .....	0.01	0.00
Erysipelas .....	0.14	0.14
Smallpox .....	0.00	0.00
Measles .....	8.86	10.11
Pneumonia .....	0.72	0.66
Acute Poliomyelitis (including Polio-encephalitis) .....		
Paralytic.....	0.06	0.14
Non-paralytic .....	0.03	0.14
Food poisoning .....	0.13	0.22



CIVILIAN CASES OF INFECTIOUS DISEASE, 1952.  
(Final numbers after correction).

TABLE III.

DISEASES.	URBAN DISTRICTS.												RURAL DISTRICTS.								Totals for Administrative County			
	Brackley (Borough)	Daventry (Borough)	Higham Ferrers (Boro')	Kettering (Borough)	Burton Latimer	Corby	Desborough	Irthlingborough	Oundle	Raunds	Rothwell	Rushden	Wellingborough	Totals for Combined Urban Districts	Brackley	Brixworth	Daventry	Kettering	Northampton	Oundle and Thrapston		Towcester	Wellingborough	Totals for Combined Rural Districts
Smallpox ...	—	—	—	—	—	—	—	—	—	—	—	—	—	178	3	22	13	7	34	2	12	21	114	292
Scarlet Fever ...	—	—	—	—	—	13	6	—	—	—	—	28	27	18	—	—	2	1	4	3	1	1	16	34
Diphtheria ...	—	1	2	12	—	—	—	1	—	—	—	1	2	30	—	4	—	1	—	—	—	2	3	33
Erysipelas ...	—	—	1	7	—	—	—	—	—	—	—	11	21	89	4	9	3	6	31	9	12	8	82	171
Puerperal Pyrexia ...	1	—	2	23	18	5	—	—	—	2	—	129	539	1444	23	273	138	16	198	207	68	233	1156	2600
Pneumonia ...	3	37	70	30	162	258	80	4	121	11	—	17	61	289	6	31	9	32	92	72	55	26	323	612
Measles ...	—	2	10	148	22	20	1	—	1	7	—	—	—	—	4	7	10	5	9	13	6	3	57	125
Whooping Cough	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3	1	1	—	6	3	3	1	18	33
Tuberculosis of the Respiratory System ...	3	5	2	21	2	3	1	6	1	5	2	11	8	68	4	7	10	5	9	13	6	3	57	125
Other forms of Tuberculosis	—	—	—	3	2	2	—	—	1	—	—	2	3	15	3	1	1	—	6	3	3	1	18	33
Acute Poliomyelitis	—	—	1	1	—	—	—	—	—	—	—	1	—	3	—	1	1	—	—	1	1	—	1	4
Paralytic ...	—	—	—	—	—	—	—	—	—	—	—	1	—	1	—	—	—	—	—	—	1	—	3	4
Non-Paralytic	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1
Acute Encephalitis	—	—	—	1	—	—	—	—	—	—	—	—	—	1	—	—	—	1	—	—	—	—	—	1
Infective ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1
Post Infectious	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	1
Dysentery (Bacillary)	—	—	19	6	—	1	—	—	—	—	1	—	—	27	—	12	—	1	—	—	—	1	13	40
Malaria ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	1
Ophthalmia Neonatorum	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2
Meningococcal Infection	—	—	—	2	—	—	—	—	—	—	—	—	—	2	—	—	—	—	—	—	—	—	—	1
Typhoid Fever ...	—	—	—	—	—	—	1	—	—	—	2	—	—	1	—	2	1	—	2	—	—	—	5	10
Paratyphoid Fever	—	—	—	2	—	—	1	—	—	—	—	—	—	5	—	10	3	—	18	—	—	4	36	57
Food Poisoning ...	—	—	2	9	—	—	—	—	—	—	—	3	7	21	1	10	3	—	—	—	—	—	—	—
Totals ...	7	45	123	318	224	302	90	11	124	31	18	204	695	2192	44	372	181	69	394	310	158	301	1829	4021

TABLE IV.

## SEX AND AGE DISTRIBUTION OF NOTIFIABLE DISEASES, 1952.

Numbers of Cases of Infectious Diseases originally notified during 1952, and of the Final numbers according to Sex and Age after corrections subsequently made either by the Notifying Practitioner or the Medical Superintendent of the Infectious Diseases Hospital.

	Scarlet Fever		Whooping Cough		Acute Poliomyelitis				Measles (excluding Rubella)		Diphtheria	
					Para.		Non-Para.					
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
<b>No. originally notified</b> Total (all ages) ...	135	160	300	312	2	3	2	3	1299	1302	—	—
<b>Final nos. after correction</b>												
Under 1 year ...	—	—	27	28	—	—	—	1	20	30	—	—
1-2 years ...	11	8	65	63	—	—	1	—	202	186	—	—
3-4 years ...	39	35	83	101	—	1	—	—	314	348	—	—
5-9 years ...	62	82	116	106	—	—	1	1	684	640	—	—
10-14 years ...	13	23	6	6	—	—	—	—	54	70	—	—
15-24 years ...	5	9	—	—	1	1	—	—	12	11	—	—
25 and over ...	3	2	1	8	—	1	—	—	11	8	—	—
Age unknown ...	—	—	2	—	—	—	—	—	2	8	—	—
Total (all ages) ...	133	159	300	312	1	3	2	2	1299	1301	—	—
	Acute Pneumonia		Dysentery		Smallpox		Acute Encephalitis				Enteric or Typhoid Fever	
							Infec.		Post-Inf.			
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
<b>No. originally notified</b> Total (all ages) ...	92	79	23	21	—	—	—	1	—	1	—	1
<b>Final nos. after correction</b>												
Under 5 years ...	9	21	7	3	—	—	—	1	—	—	—	1
5-14 years ...	8	11	8	6	—	—	—	—	—	1	—	—
15-44 years ...	33	12	2	9	—	—	—	—	—	—	—	—
45-64 years ...	27	18	3	1	—	—	—	—	—	—	—	—
65 and over ...	14	17	—	1	—	—	—	—	—	—	—	—
Age unknown ...	1	—	—	—	—	—	—	—	—	—	—	—
Total (all ages) ...	92	79	20	20	—	—	—	1	—	1	—	1
	Paratyphoid Fever		Erysipelas		Meningococcal Infection		Food Poisoning		Other notifiable diseases			
									Original		Final	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
<b>No. originally notified</b> Total (all ages) ...	3	8	16	18	1	1	38	30	Puerperal Pyrexia			
<b>Final nos. after correction</b>									—	33	—	33
Under 5 years ...	—	2	—	—	1	—	2	—	Ophthalmia Neon.			
5-14 years ...	1	2	—	—	—	—	1	2	—	—	—	—
15-44 years ...	—	3	4	5	—	1	16	13	Malaria			
45-64 years ...	1	1	5	8	—	—	9	7	1	—	1	—
65 and over ...	—	—	5	5	—	—	2	5				
Age unknown ...	—	—	2	—	—	—	—	—				
Total (all ages) ...	2	8	16	18	1	1	30	27				

## NORTHAMPTONSHIRE.

## TUBERCULOSIS DEATHS AND MORTALITY RATES, 1900-1952.

Year	Estimated Populations.	Tuberculosis of Respira- tory System.	Death Rate per 1000 of Population.	Other forms of Tuberculosis.	Death Rate per 1000 of Population.	All forms of Tuberculosis.	Death Rate per 1000 of Population.
1900	220,678	205	.93	46	.20	251	1.13
1901	207,719	162	.78	47	.22	209	1.00
1902	209,984	199	.94	63	.30	262	1.24
1903	212,610	182	.85	66	.31	248	1.16
1904	213,874	204	.95	82	.38	286	1.33
1905	214,909	165	.77	85	.39	250	1.16
1906	216,319	186	.86	63	.29	249	1.15
1907	216,935	196	.90	61	.28	257	1.18
1908	217,765	207	.95	68	.31	275	1.26
1909	219,149	185	.84	77	.35	262	1.19
1910	220,897	190	.86	66	.29	256	1.15
1911	213,796	204	.95	77	.36	281	1.31
1912	215,091	197	.92	57	.26	254	1.18
1913	215,579	192	.89	58	.26	250	1.15
1914	216,569	178	.82	50	.23	228	1.05
1915	211,286	202	.95	59	.28	261	1.23
1916	202,552	242	1.19	60	.30	302	1.49
1917	190,215	229	1.20	55	.29	284	1.49
1918	192,564	230	1.19	59	.31	289	1.50
1919	207,508	183	.88	52	.25	235	1.13
1920	215,777	160	.74	44	.20	204	0.94
1921	212,270	172	.81	46	.21	218	1.02
1922	213,340	162	.76	27	.12	189	0.88
1923	214,331	159	.74	38	.17	197	0.91
1924	215,200	169	.78	27	.13	196	0.91
1925	215,300	174	.80	35	.17	209	0.97
1926	214,200	136	.63	28	.13	164	0.76
1927	215,000	162	.75	30	.14	192	0.89
1928	215,100	140	.65	32	.14	172	0.79
1929	216,500	159	.73	20	.09	179	0.82
1930	217,550	150	.69	31	.14	181	0.83
1931	218,300	130	.60	25	.11	155	0.71
1932	213,900	115	.53	24	.11	139	0.64
1933	214,300	116	.54	20	.09	136	0.63
1934	214,550	114	.53	34	.15	148	0.68
1935	216,200	119	.55	27	.12	146	0.67
1936	217,600	99	.45	18	.08	117	0.53
1937	220,400	94	.42	28	.13	122	0.55
1938	221,400	104	.47	24	.10	128	0.57
1939	228,300	96	.42	16	.07	112	0.49
1940	241,200	113	.47	28	.11	141	0.58
1941	259,820	106	.41	24	.09	130	0.50
1942	243,800	92	.38	28	.11	120	0.49
1943	235,000	101	.43	17	.07	118	0.50
1944	233,340	112	.48	33	.14	145	0.62
1945	228,640	111	.48	22	.10	133	0.58
1946	236,340	87	.37	20	.08	107	0.45
1947	240,210	69	.29	18	.07	87	0.36
1948	247,820	87	.35	18	.07	105	0.42
1949	250,500	101	.40	8	.03	109	0.43
1950	254,210	65	.26	10	.04	75	0.30
1951	256,700	57	.22	9	.04	66	0.26
1952	258,500	55	.21	9	.03	64	0.25



## VITAL STATISTICS FOR 1952 AND PREVIOUS YEARS.

Year.	Estimated Population mid-year.	BIRTHS.		DEATHS			
				Under 1 year.		All Ages.	
		No.	Rate.	No.	Rate.	No.	Rate.
1897	228,955	6761	29.50	906	134.00	3559	15.53
1898	234,902	6647	28.29	888	133.59	3374	14.30
1899	240,484	6632	27.59	870	131.10	3399	14.10
1900	§220,678	5621	25.47	617	109.76	3078	13.90
1901	207,719	5641	27.15	579	102.60	2758	13.27
1902	209,984	5453	25.96	535	98.11	2785	13.26
1903	212,610	5430	25.53	560	103.13	2838	13.34
1904	213,874	5265	24.61	614	116.61	2964	13.85
1905	215,909	5168	23.93	585	113.19	2812	13.02
1906	216,319	4997	23.10	514	102.86	2638	12.19
1907	216,935	4643	21.40	410	80.30	2656	12.24
1908	217,765	4755	21.83	454	95.47	2749	12.62
1909	219,149	4597	20.97	384	83.53	2790	12.73
1910	220,897	4430	20.05	356	80.36	2493	11.28
1911	213,796	4378	20.47	421	96.16	2692	12.59
1912	215,091	4281	19.90	342	79.88	2601	12.00
1913	215,579	4296	19.92	368	85.66	2525	11.71
1914	216,569	4146	19.14	305	73.56	2594	11.97
1915	211,286	4016	18.54	382	95.11	3012	14.25
1916	202,552	3822	17.34	254	66.00	2702	13.33
1917	190,215	3197	15.07	259	81.00	2665	14.01
1918	192,564	3096	14.34	210	67.00	2938	15.25
1919	‡207,508	3140	14.52	254	80.00	2873	13.84
	*216,162						
1920	‡215,777	4913	22.74	293	59.00	2393	11.09
	*215,968						
1921	212,769	4166	19.57	300	72.00	2514	11.84
1922	‡213,340	3875	18.12	227	58.00	2507	11.75
	*213,840						
1923	‡214,331	3686	17.15	225	61.00	2475	11.54
	*214,820						
1924	215,200	3494	16.23	185	52.00	2494	11.58
1925	215,300	3480	16.16	197	56.60	2525	11.72
1926	214,200	3393	15.84	177	52.16	2436	11.37
1927	215,000	3108	14.45	159	51.00	2539	11.80
1928	215,170	3175	14.75	154	48.00	2507	11.65
1929	216,500	3104	14.33	171	55.09	2649	12.23
1930	217,500	2991	13.74	126	42.12	2490	11.44
1931	218,300	2924	13.39	135	46.10	2472	11.32
1932	§213,900	2743	12.76	125	45.50	2463	11.45
1933	214,300	2665	12.43	112	42.02	2542	11.85
1934	214,550	2688	12.52	154	57.29	2706	12.61
1935	216,200	2881	13.32	146	50.67	2707	12.52
1936	217,600	3047	14.00	146	47.91	2660	12.22
1937	220,400	3104	14.08	136	43.81	2689	12.20
1938	221,400	3184	14.38	131	41.14	2552	11.52
1939	‡228,300	3336	15.02	137	40.41	2758	12.08
	*222,100						
1940	241,200	3363	13.94	170	48.39	3153	13.07
1941	259,820	3511	13.51	182	48.08	3103	11.94
1942	243,800	4062	16.66	140	34.46	2687	11.02
1943	235,000	4210	17.91	170	40.38	2890	12.29
1944	233,340	4684	20.07	178	38.00	2952	12.65
1945	228,640	4340	18.98	170	39.17	2822	12.34
1946	236,340	4531	19.17	167	36.86	2835	12.00
1947	240,210	4905	20.42	172	35.07	2986	12.43
1948	247,820	4326	17.46	137	31.67	2727	11.00
1949	250,500	4056	16.19	137	33.78	3023	12.07
1950	254,210	3995	15.71	118	29.53	3054	12.01
1951	256,700	3997	15.57	101	25.26	3112	12.13
1952	258,500	4006	15.50	100	24.96	2853	11.03

§ Extension of Borough of Northampton.

‡ Population for calculation of Death Rate.

\* Population for calculation of Birth Rate.

TABLE VII.

## HOUSING.

	RURAL DISTRICT							
	<i>Brackley</i>	<i>Brixworth</i>	<i>Daventry</i>	<i>Kettering</i>	<i>North- ampton</i>	<i>Oundle &amp; Thrapston</i>	<i>Towcester</i>	<i>Welling- borough</i>
<b>1. Provision of New Housing Accommodation—</b>								
(a) PERMANENT HOUSES :								
Number of post-war houses erected by local authority up to 31/12/1952 ... ..	289	402	480	426	971	339	631	388
Number of post-war houses erected by local authority during 1952 ... ..	32	40	56	108	128	61	64	63
Number of post-war houses under construction by local authority at 31/12/1952 ...	63	60	62	74	172	90	60	85
(b) TEMPORARY HOUSES :								
Number completed as at 31/12/1952 ... ..	nil	nil	nil	nil	40	40	30	nil
(c) CONVERSIONS AND ADAPTATIONS:								
Number completed as at 31/12/1952 ... ..	nil	9	nil	nil	nil	193 (emergency housing)	nil	8
<b>2. Unfit Houses—</b>								
Number of houses subject to Demolition Order or Clearance Order, still occupied under licence or otherwise ...	69	30	nil	5	69	11	130	1
Number of unfit houses dealt with under Housing Act, 1936 By Demolition Order Procedure								
Post-war up to 31/12/1951	11	28	nil	21	11	13	46	nil
During 1952 ... ..	3	15	nil	15	2	6	12	7
Clearance Area Procedure								
Post-war up to 31/12/1951	5	31	nil	nil	77	nil	nil	nil
During 1952 ... ..	nil	21	nil	nil	nil	25	nil	nil
Number of unfit houses to be dealt with								
By Demolition Order procedure ... ..	146	under review	} 1328	} 745	under review	} 945	under review	under review
By Clearance Area procedure	586							
<b>3. Number of Houses overcrowded</b>	not known	not known	not known	1	not known	3	not known	not known
<b>4. Number of applicants for new houses</b> ... ..	543	530	611	270	850	498	510	410
<b>5. Improvement Grants, Part III, Housing Act, 1949</b>								
Applications received by local authority ... ..	3	2	13	8	13	6	8	nil
Applications approved by local authority ... ..	3	2	3	7	5	4	5	nil
Applications rejected by local authority ... ..	nil	nil	† 10	1	2	2	3	nil
Applications forwarded to Ministry ... ..	3	2	3	6	11	6	5	nil
Applications approved by Ministry ... ..	2	2	3	2	4	4	4	nil
Applications rejected by Ministry ... ..	1	nil	nil	2	6	2	1	nil
Applications under consideration	nil	nil	nil	2	1	nil	nil	nil

† withdrawn by applicants.

TABLE VIII.

## DETAILS OF WATER SUPPLIES AND METHODS OF SEWAGE DISPOSAL IN THE RURAL DISTRICTS.

Parish	Population— 1931 Census	Total No. of houses in Parish	No. of houses served		Piped Water Supplies				Non-Piped Water Supplies							Drainage and Sewerage				
					Sources		Reservoirs	Public Supplies		Private Supplies		Is an adequate sewerage system provided for house drainage	No. of houses with drains discharging to	Closet Accommodation						
					Water laid on	Stand Pipes		Springs	Wells	Site	Capacity (gallons)			Wells	Springs	No. of houses served	Wells	Springs	No. of Houses Served	Surface Water Drains
BRACKLEY.																				
Aston-le-Walls	193	48	24	7	—	—	Raised storage tank in village	3,000	—	—	—	19	—	19	No	—	36	24	20	4
Aynho	367	119	38	45	—	—	Private supply, open reservoir in village	2,500	—	—	—	44	3	47	Yes	—	95	48	42	29
Boddington	325	152	18	55	—	—	Small collecting chamber fed by spring	—	—	—	—	76	—	76	No	—	116	29	101	22
Chacombe	274	106	34	—	—	—	Raised storage tank on R.D.C. Housing estate	1,500	—	—	—	42	30	72	New scheme completed 1952	—	96	55	53	18
Chipping Warden	298	131	—	—	—	—	—	—	—	—	—	99	3	102	do.	—	114	49	65	17
Croughton	404	137	87	41	—	—	Underground reservoir outside village	8,000	—	—	—	16	8	24	do.	—	115	72	61	4
Culworth	410	127	17	—	—	—	Raised storage tank on Council housing estate supplied by pump from borehole	—	—	—	—	109	5	114	do.	—	75	39	73	15
Edgcote	84	18	7	—	—	—	Private supply	—	—	—	—	11	—	11	No	—	—	12	6	—
Evenley	313	122	44	39	—	—	Private supply by wind and electric pump	—	—	—	—	39	—	39	No	—	80	47	70	5
Eydon	422	119	20† 22*	45	—	—	† Private supply from well * Public supply raised storage tank on housing estate	—	—	—	—	32	—	32	No	—	96	39	70	10
Farthinghoe	271	100	15	67	—	—	Private supply, wind and electric pump to raised storage tank	10,000	—	—	—	19	—	19	No (Scheme in hand)	—	68	31	63	6
Greatworth	358	132	38	31	—	—	Ram or electric pumps supply ground level reservoir, supplying village by gravitation	6,000	—	—	—	61	4	65	No (Scheme in hand)	—	106	21	98	13
Helmdon	477	173	14†118*	—	—	—	† Public supply, raised storage tank on Council housing estate * Collecting chamber supplied by spring, village supplied by gravitation	—	—	—	—	40	1	41	No (Scheme in hand)	—	107	34	122	17
Hinton-in-the-Hedges	122	33	11	16	—	—	Ram or electric pump to raised storage tank	2,000	—	—	—	6	—	6	No	—	18	15	11	7
Kings Sutton	990	397	123	67	—	—	Electric pump to raised storage tank	—	—	—	—	207	—	207	Yes	—	352	158	213	26
Marston St. Lawrence	195	45	28	15	—	—	Overflow from Greatworth ram supplies ground level reservoir	6,000	—	—	—	2	—	2	No	—	24	28	14	3
Middleton Cheney	1131	376	91	—	—	—	Private supply, electric pump from bore to raised storage tank	—	—	—	—	303	—	303	No (Scheme for Overthorpe completed 1949)	—	353	142	210	24
Moreton Pinkney	304	114	14	59	—	—	Springs to underground collecting chamber, electric pump to raised tank	1,200	—	—	—	41	—	41	New scheme completed 1952	—	103	36	67	11
Newbottle	308	117	60	34	—	—	Ram and electric pump from underground collecting chamber fed by spring to raised tank	10,000	—	—	—	23	—	23	No	—	82	52	45	20
Radstone	86	27	17	—	—	—	Private supply, electric pump from bore to small storage tank	—	—	—	—	10	—	10	No	—	16	9	11	7
Sulgrave	319	112	—	—	—	—	—	—	—	—	—	109	—	109	No (New scheme in hand)	—	71	41	46	25
Syresham	582	217	58	—	—	—	Electric pump from shallow well to raised storage tank	3,000	—	—	—	168	—	168	No	—	142	71	106	40
Thenford Thorpe	125	25	—	—	—	—	—	—	—	—	—	25	—	25	No	—	14	5	16	4
Mandeville	150	48	6	6	—	—	Overflow from farm supply pumped to raised storage tank supplying Council houses	—	—	—	—	32	4	36	No	—	31	17	21	10
Warkworth	44	13	—	—	—	—	—	—	—	—	—	12	—	12	No	—	6	1	9	3
Whitfield	140	52	14	26	—	—	Ground level reservoir	10,000	—	—	—	12	—	12	No	—	31	20	25	7

Note : The Rural District Council's Regional Water Supply Scheme, whereby the whole of the Rural District will be provided with a piped water supply, obtained in bulk from the Bucks Water Board, is substantially completed, a few house connections having already been made.



TABLE VIII.—continued

Parish	Piped Water Supplies							Non-Piped Water Supplies							Drainage and Sewerage							
	Population— 1931 Census	Total No. of houses in Parish	No. of houses served	Sources			Reservoirs	Public Supplies			Private Supplies			Is an adequate sewerage system provided for house drainage	No. of houses with drains discharging to		Closet Accommodation					
				Water laid on	Stand Pipes	Springs		Wells	Site	Capacity (gallons)	Wells	Springs	No. of houses served		Wells	Springs	No. of Houses Served	Surface Water	Drains	Sewers	W.Cs.	Pail Closets
BRIXWORTH.																						
Althorpe	71	15	15	—	—	—	Harlestone	—	—	—	—	—	—	Yes	—	3	15	—	—	—		
Arthingworth	165	60	40	15	—	—	Ravensthorpe	—	—	—	5	—	5	No	—	57	55	2	—	—		
Boughton	578	566	541	—	—	—	Ravensthorpe	—	—	—	25	—	25	No	—	566	559	4	3	—		
Brampton, Chapel	230	70	64	—	—	—	Ravensthorpe	—	—	—	6	—	6	No	—	70	65	—	5	—		
Brampton, Church	187	55	49	—	—	—	Ravensthorpe	—	—	—	6	—	6	No	—	53	53	—	—	—		
Brington	562	185	165	—	—	—	Brington	—	—	—	20	—	20	No	—	185	165	14	6	—		
Brixworth	1173	501	461	—	—	—	Ravensthorpe	—	—	—	40	—	40	No	—	501	474	24	3	—		
Clipston	408	156	137	—	—	—	Ravensthorpe	—	—	—	19	—	19	No	50	106	115	28	14	—		
Cold Ashby	249	79	71	—	—	—	Ravensthorpe	—	—	—	8	—	8	Yes	—	79	72	7	—	—		
Cottesbrooke	213	63	57	—	—	—	Ravensthorpe	—	—	—	6	—	6	No	—	63	58	5	—	—		
Creaton	324	117	106	—	—	—	Ravensthorpe	—	—	—	11	—	11	No	—	117	95	10	12	—		
Draughton	90	32	27	—	—	—	Ravensthorpe	—	—	—	5	—	5	No	—	32	28	4	—	—		
East Farndon	236	77	71	—	—	—	Welford	—	—	—	6	—	6	Yes	—	73	58	10	5	—		
East Haddon	413	140	130	—	—	—	Ravensthorpe	—	—	—	10	—	10	No	Scheme in hand							
Guilsborough	466	169	144	—	—	—	Ravensthorpe	—	—	—	15	—	15	No	—	169	157	11	1	—		
Hannington	114	42	36	—	—	—	Ravensthorpe	—	—	—	6	—	6	No	Scheme in hand							
Harlestone	511	158	149	—	—	—	Harlestone	—	—	—	9	—	9	No	—	158	143	15	—	—		
Haselbech	106	34	27	—	—	—	Ravensthorpe	—	—	—	7	—	7	No	33	—	7	21	5	—		
Holcot	305	120	102	—	—	—	Ravensthorpe	—	—	—	18	—	18	No	Scheme in hand							
Holdenby	181	43	37	—	—	—	Ravensthorpe	—	—	—	6	—	6	No	—	43	43	—	—	—		
Hollowell	322	80	72	—	—	—	Ravensthorpe	—	—	—	8	—	8	Yes	—	80	74	4	2	—		
Kelmarsh	127	44	40	—	—	—	Ravensthorpe	—	—	—	4	—	4	No	44	—	36	6	2	—		
Lampport	263	83	74	—	—	—	Ravensthorpe	—	—	—	9	—	9	No	83	—	37	40	6	—		
Maidwell	128	51	41	—	—	—	Ravensthorpe	—	—	—	10	—	10	No	51	—	31	19	1	—		
Marston Trussell	190	54	39	—	—	—	Supplied by Market Harborough U.D.C.	—	—	—	15	—	15	No	—	54	52	—	1	—		
Moulton	1638	810	750	—	—	—	Ravensthorpe	—	—	—	60	—	60	Yes	—	768	801	6	3	—		
Naseby	399	129	101	—	—	—	Ravensthorpe	—	—	—	28	—	28	No	Scheme in hand							
Old	291	97	76	—	—	—	Ravensthorpe	—	—	—	21	—	21	No	—	97	97	—	—	—		
Overstone	235	78	59	—	—	—	Ravensthorpe	—	—	—	19	—	19	No	Scheme in hand							
Oxendon, Great	253	79	49	—	—	—	Welford	—	—	—	30	—	30	No	79	—	68	7	4	—		
Pitsford	470	170	154	—	—	—	Ravensthorpe	—	—	—	16	—	16	No	—	170	161	3	6	—		
Ravensthorpe	364	116	94	—	—	—	Ravensthorpe	—	—	—	22	—	22	No	—	116	116	—	—	—		
Scaldwell	286	92	74	—	—	—	Ravensthorpe	—	—	—	18	—	18	No	—	92	79	13	—	—		
Sibbertoft	197	77	54	—	—	—	Welford	—	—	—	23	—	23	No	—	77	44	12	21	—		
Spratton	681	239	201	—	—	—	Ravensthorpe	—	—	—	38	—	38	No	—	239	235	4	—	—		
Sulby	98	22	—	—	—	—	Ravensthorpe	—	—	—	16	—	22	No	—	—	7	15	—	—		
Thornby	181	54	39	—	—	—	Ravensthorpe	—	—	—	15	—	15	No	54	—	9	45	—	—		
Walgrave	659	209	193	—	—	—	Ravensthorpe	—	—	—	16	—	16	No	Scheme in hand							
Welford	761	253	231	—	—	—	Welford	—	—	—	22	—	22	Yes	Scheme in hand							
Note : The whole of the Brixworth Rural District is within the area of supply of the Mid-Northants Water Board.																						
DAVENTRY.																						
Ashby St. Ledgers	210	52	29	18	Lake	—	Private supply	22,000	—	—	—	5	—	5	Yes	11 6 to S.T.	35	31	21	—	—	
Badby	440	164	79	70	Yes	—	Badby	20,000	—	—	—	14	1	15	Yes	16 6 to S.T.	142	113	30	21	—	
Barby	471	138	109	3	—	—	North Regional Scheme (West Haddon)	—	—	—	23	—	26	Yes	—	17	121	96	38	4	—	
Braunston	1015	342	282	25	—	—	South Regional Scheme	—	—	—	31	—	35	Yes	—	19	313	289	42	11	—	
Brockhall	38	9	5	—	—	Yes	Private supply, small service reservoir	—	—	—	4	—	4	No	10 to S.T.	2	—	7	2	—	—	
Byfield	868	286	212	2	—	—	From Woodford Halse supply reservoir at Charwelton	—	1	—	8	56	4	66	Yes	7 to S.T.	11	268	260	15	11	—
Canons Ashby	49	15	1	—	—	Yes	Private supply	—	—	—	10	—	14	No	12	—	3	12	—	—	—	
Catesby	91	28	5	—	—	Yes	Private supplies, small service reservoir	—	—	—	12	1	23	No	3 to S.T.	23	—	4	15	9	—	
Charwelton	115	56	44	—	—	—	Charwelton	50,000	—	—	—	10	—	12 (Part) No	10 4 to S.T.	42	27	22	7	—	—	
Clay Coton	71	20	16	—	—	—	North Regional Scheme (West Haddon)	—	—	—	2	2	4	No	7 to S.T.	13	—	4	16	—	—	
Crick	681	226	188	8	—	—	North Regional Scheme (West Haddon)	—	—	—	24	1	30	Yes	10 6 to S.T.	210	201	16	9	—	—	
Dodford	238	55	17	2	Yes	Yes	Private, part from Weedon- Flore supply	—	1	—	11	23	—	25	No, but 8 to Weedon Scheme	32 15 to S.T.	8	18	36	1	—	
Elkington	69	18	—	—	—	—	None	—	—	—	—	16	1	18	No	16 2 to S.T.	—	2	13	3	—	

Note : The whole of the Brixworth Rural District is within the area of supply of the Mid-Northants Water Board.

TABLE VIII.—continued

Parish	Population— 1931 Census	Total No. of houses in Parish	Piped Water Supplies					Non-Piped Water Supplies							Drainage and Sewerage							
			No. of houses served			Sources	Reservoirs	Public Supplies		Private Supplies		Is an adequate sewerage system provided for house drainage	No. of houses with drains discharging to	Closet Accommodation								
			Water laid on	Stand Pipes	Springs			Wells	Capacity (gallons)	Wells	Springs			No. of houses served	Wells	Springs	No. of Houses Served	Surface Water Drains	Sewers	W.Cs.	Pail Closets	Privy Midden
								Site														
DAVENTRY—continued.																						
Everdon	406	156	149	—	—	Yes	Newnham Hill (Newnham and Everdon scheme)	20,000	—	—	—	7	—	7	No	112 44 to S.T.	—	59	80	17		
Farthingstone	177	64	14	38	—	Yes	Farthingstone	20,000	—	—	—	12	—	12	No	48 16 to S.T.	—	12	43	9		
Fawsley	29	9	2	—	—	Yes	Private supply, small service reservoir		—	—	—	7	—	7	No	7 2 to S.T.	—	2	6	1		
Flore	786	327	255	16	Yes	Yes	Upper Weedon (Weedon-Flore Scheme)	50,000	—	—	—	52	—	56	Yes	6 10 to S.T.	311	299	22	6		
Hellidon	148	61	50	—	—	—	From Woodford Halse supply reservoir at Charwelton		—	—	—	9	—	11	No	39 22 to S.T.	—	18	22	21		
Kilsby	501	171	147	—	—	—	North Regional Scheme (West Haddon)		—	—	—	21	—	24	Yes	15 10 to S.T.	146	129	39	3		
Lilbourne	209	71	60	—	—	—	North Regional Scheme (West Haddon)		—	—	—	10	—	11	No	51 20 to S.T.	—	44	27	—		
Long Buckby	2325	828	716	25	—	—	South Regional Scheme		—	—	—	83	—	87	Yes	58 33 to S.T.	745	740	83	5		
Newnham	356	130	114	—	—	—	Newnham Hill (Everdon-Newnham Scheme)	20,000	—	—	—	15	—	16	Yes	7 25 to S.T.	98	71	32	11		
Norton	315	98	21	47	Yes	—	Borough Hill, privately owned	Not known	—	—	—	29	—	30	No	83 15 to S.T.	—	9	86	3		
Preston Capes	156	58	46	—	—	—	Preston Capes (Wood- ford Halse Supply)	10,000	—	—	—	12	—	12	No	44 14 to S.T.	—	14	35	9		
Stanford	53	14	10	—	—	1	Private supply, small reservoir supplied by ram pump		—	—	—	4	—	4	No	5 9 to S.T.	—	9	5	—		
Staverton	319	116	101	—	—	—	From Daventry Borough Supply, water purchased in bulk		1	—	3	11	1	12	Yes	5 6 to S.T.	105	104	10	2		
Stowe-IX- Churches	219	71	12	4	1	—	Private supply, small reservoir supplied by ram pump		—	—	—	51	—	55	No	54 17 to S.T.	—	17	51	3		
Watford	324	90	38	18	—	—	South Regional Scheme		—	—	—	29	—	34	Yes	32 8 to S.T.	50	47	26	17		
Weedon Bec	1750	438	390	13	—	—	Upper Weedon (Weedon-Flore Scheme)	50,000	—	—	—	32	—	35	Yes	12 4 to S.T.	422	408	30	—		
Welton	358	117	93	17	—	—	South Regional Scheme		—	—	—	7	—	7	(Part) No	53 7 to S.T.	57	58	58	1		
West Haddon	714	227	171	36	Yes	—	North Regional Scheme	50,000	—	—	—	18	—	20	Yes	16 9 to S.T.	202	190	19	18		
Whilton	216	71	15	21	—	—	South Regional Scheme		—	—	—	32	—	35	No	52 19 to S.T.	—	17	51	—		
Winwick	153	36	31	4	—	—	North Regional Scheme		—	—	—	1	—	1	Yes	3 14 to S.T.	19	29	7	—		
Woodford- cum-Membris	1740	602	556	2	—	—	Woodford Hill (Wood- ford Halse Supply)	31,000	—	—	—	42	—	44	Yes	21 5 to S.T.	576	579	23	—		
Yelvertoft	349	132	79	33	—	—	North Regional Scheme		—	—	—	20	—	20	(Part) No	65 14 to S.T.	53	64	68	—		

S.T. indicates drainage to Septic Tank

Note : The whole of the Daventry Rural District is now within the area of supply of the Mid-Northants Water Board.

**KETTERING.**

Ashley	176	58	7	Nil	—	Yes	Private supplies	—	1	—	5	Yes	—	46	No	58	—	41	17	N
Brampton Ash	125	51	19	Nil	—	Yes	Private supplies	—	—	—	—	Yes	—	32	No	51	—	22	29	N
Braybrooke	270	87	19	Nil	—	Yes	Private supplies	—	—	—	—	Yes	—	68	No	87	—	52	35	N
Broughton	1524	483	383	38	—	1	M.N.W.B. Water Tower, Northampton Road	30,000	—	—	—	Yes	—	62	Yes	—	483	474	9	N
Cottingham	607	205	81	30	Yes	—	Copyholders' supply, private	—	Yes	—	30	Yes	—	64	No	205	—	130	75	N
Cranford	470	159	52	95	—	—	Woodford Tower (Oundle and Thrapston R.D.C.)	60,000	—	—	—	Yes	—	12	No	159	—	58	101	N
Cransley	313	111	72	Nil	—	—	M.N.W.B. Ravensthorpe	—	1	—	6	Yes	—	31	No	111	—	54	57	N
Dingley	137	28	14	Nil	—	Yes	Private supply	—	—	—	—	Yes	—	14	No	28	—	17	11	N
East Carlton	224	70	67	Nil	—	—	Private supply, Corby Water Co.	—	—	—	—	Yes	—	3	No	70	—	67	3	N
Geddington	1154	405	315	11	—	—	M.N.W.B. Stanion Lane, Corby	—	3	2	†	Yes	—	†79	Yes	172*233	273	132	N	

(† Combined total)



TABLE VIII.—*continued*

Parish	Population— 1931 Census	Total No. of houses in Parish	Piped Water Supplies						Non-Piped Water Supplies							Drainage and Sewerage					
			Sources			Reservoirs			Public Supplies		Private Supplies		Is an adequate sewerage system provided for house drainage	No. of houses with drains discharging to		Closet Accommodation					
			Water laid on	Stand Pipes	Springs	Wells	Site	Capacity (gallons)	Wells	Springs	No. of houses served	Wells		Springs	No. of Houses Served	Surface Water	Drains	Sewers	W.Cs.	Pail Closets	Privy Midden
KETTERING—continued.																					
Broughton	340	105	98	—	—	Yes	Woodford W.T. (Oundle and Thrapston R.D.C.)	60,000	—	—	—	Yes	—	7	No	105	—	62	43	Nil	
Underwood	1059	281	230	8	—	—	M.N.W.B. Stanion Lane, Corby	—	—	—	—	Yes	—	43	Yes	31*250	256	25	Nil		
Barrington	150	51	35	5	—	—	M.N.W.B. Ravensthorpe	—	—	—	Yes	—	11	No	51	—	16	35	Nil		
Waddington	312	113	63	—	—	—	M.N.W.B. Ravensthorpe	—	1	—	4	Yes	—	46	No	113	—	70	43	Nil	
Widdleton	326	94	22	—	Yes	—	Copyholders' supply, private	Yes	—	12	Yes	Yes	58	No	94	—	53	41	Nil		
Newton	100	34	34	—	—	—	M.N.W.B. Stanion Lane, Corby	—	—	—	—	—	—	No	34	—	8	26	Nil		
Oakley	394	85	63	—	—	Yes	{ Gt. Oakley, private supply Lt. Oakley, M.N.W.B. Corby	—	—	—	Yes	—	22	No	85	—	25	60	Nil		
Orton	63	19	15	—	—	—	M.N.W.B. Ravensthorpe	—	—	—	Yes	—	4	No	19	—	4	15	Nil		
Pytchley	514	166	125	35	—	Yes	M.N.W.B. Broughton Road, Pytchley	35,000	—	—	—	Yes	—	6	Yes	—	166	156	10	Nil	
Rockingham	170	57	57	—	—	Yes	Private supply, raised storage tank	—	—	—	—	—	—	No	57	—	23	34	Nil		
Rushton	393	136	93	—	—	Yes	Private supply, raised storage tank	—	—	—	Yes	—	43	No	136	—	37	99	Nil		
Stanion	305	104	64	6	—	—	M.N.W.B. Stanion Lane, Corby	—	—	—	Yes	—	34	No	104	—	28	76	Nil		
Stoke Albany	264	88	15	50	—	—	Private supply, small collecting chamber, supplying village by gravitation	—	—	—	Yes	—	23	No	88	—	72	16	Nil		
Wotton Bassett	70	26	5	—	—	Yes	Private supplies	Yes	—	14	Yes	—	7	No	26	—	15	11	Nil		
Worthington	115	42	30	11	—	—	M.N.W.B. Cransley	—	—	—	Yes	—	1	No	42	—	30	12	Nil		
Warkton	166	54	48	6	—	Yes	M.N.W.B. Weekley	—	—	—	—	—	—	No	54	—	22	32	Nil		
Weekley	210	61	61	—	—	Yes	M.N.W.B. Weekley	—	—	—	—	—	—	No	61	—	57	4	Nil		
Weldon	1638	420	380	8	—	—	M.N.W.B. Corby	—	—	—	Yes	—	32	Yes	44*376	384	32	Nil			
Weston-by-Welland	126	42	10	—	—	Yes	Private supplies	Yes	Yes	10	Yes	—	22	No	42	—	27	15	Nil		
Wilbarston	490	161	36	—	—	Yes	Private supplies	Yes	—	47	Yes	—	75	No	161	—	140	21	Nil		

\* Denotes recent installation of new sewerage scheme—connections to sewers proceeding.

Note : The whole of the Kettering Rural District is now within the area of supply of the Mid-Northants Water Board.

Parish	Population— 1931 Census	Total No. of houses in Parish	Piped Water Supplies				Non-Piped Water Supplies								Drainage and Sewerage				
			No. of houses served	Sources			Reservoirs	Capacity (gallons)	Public Supplies		Private Supplies		Is an adequate sewerage system provided for house drainage	No. of houses with drains discharging to			Closet Accommodation		
				Water laid on	Stand Pipes	Springs			Wells	Site	No. of houses served	No. of houses served		No. of houses served	No. of houses served	No. of houses with			
NORTHAMPTON.																			
Ashton	266	109	90	—	—														
Billing	394	217	Information not available																
Brafield-on- the-Green	486	210	168	—	—	Green Road	250,000	—											
Bugbrooke	826	314	269	—	—														
Castle Ashby	236	69	74	—	—														
Cogenhoe	510	221	147	—	—														
Collingtree	192	83	46	—	—														
Courteenhall	121	43	8	—	—														
Denton	424	144	133	—	—	Windmill Road	6,000	4	—										
Duston	1838	918	Information not available			Main Road		—											
Hackleton	962	310	138	—	—														
Hardingstone	701	329	Information not available																
Harpole	830	339	296	—	—	Road Hill	50,000	—											
Hartwell	337	169	155	—	—	Nobottle Road	250,000												
Heyford, Nether	686	225	177	—	—	Forest Road		—											
Heyford, Upper	109	29	20	—	—														
Houghton, Gt.	250	86	6	—	—														
Houghton, Lt.	415	149	106	—	—	Lodge Road													
Kislingbury	670	258	249	—	—	West of St. Crispin's													
Milton	551	192	91	—	—														
Quinton	92	46	24	—	—														
Road	701	341	294	—	—	Near Cemetery		—											
Rothersthorpe	240	85	42	—	—														
Upton	1290	14	33	—	—														
Weston Favell	701	591	Information not available																
Wootton	621	325	Information not available																
Yardley Hastings	796	292	260	—	—	Marshall's Farm		—											

Note : The whole of the Northampton Rural District is now within the area of supply of the Mid-Northants Water Board.



TABLE VIII—continued.

Parish	Piped Water Supplies							Non-Piped Water Supplies							Drainage and Sewerage						
	Population— 1931 Census	Total No. of houses in Parish	No. of houses served	Sources			Reservoirs	Public Supplies			Private Supplies			Is an adequate sewerage system provided for house drainage	No. of houses with drains discharging to			Closet Accommodation			
				Water laid on	Stand Pipes	Springs		Wells	Capacity (gallons)	Wells	Springs	No. of houses served	Wells		Springs	No. of Houses Served	Surface Water Drains	Sewers	W.Cs.	No. of houses with	
																				Pail Closets	Privy Midden
OUNDL E AND THRAPSTON (Northern Area)																					
Apethorpe	200	56	48	—	Yes	—	Apethorpe	25,000	—	—	—	1	1	8	Yes	—	44	46	10	—	
Ashton	188	52	43	—	—	Yes	Ashton	20,000	—	—	—	6	—	9	Yes	—	36	45	7	—	
Barnwell	293	143	109	26	—	Yes	Hemington	60,000	—	—	—	5	—	8	No	78	*29	76	67	—	
Blatherwycke	92	31	2	—	—	Yes	—	—	1	—	16	3	2	13	No	1	—	4	19	8	
Benefield	343	122	40	67	—	—	M.N.W.B., Benefield	26,000	—	—	—	6	1	15	No	59	*11	31	91	—	
Bulwick	201	60	—	—	—	—	—	—	—	—	—	11	3	60	No	42	—	9	45	6	
Collyweston	412	185	45	14	—	Yes	Collyweston	60,000	1	—	10	43	2	116	No	42	*45	53	132	—	
Cotterstock	117	38	28	10	—	Yes	Ashton Wold	60,000	—	—	—	—	—	—	No	26	—	6	32	—	
Deene	135	41	—	—	—	—	—	—	1	—	25	5	1	16	Yes	—	37	8	31	2	
Deenethorpe	85	32	—	—	—	—	—	—	2	—	19	6	2	13	No	20	—	8	20	4	
Duddington	223	81	8	25	—	Yes	Collyweston	60,000	1	—	6	16	—	42	No	30	—	12	67	2	
Easton-on-the-Hill	814	266	22	195	Yes	—	Easton	13,000	—	—	—	22	—	49	No	31	—	38	228	—	
Fineshade	47	23	—	—	—	—	—	—	—	—	—	3	1	23	No	—	—	9	14	—	
Fotheringhay	213	57	30	6	—	Yes	Ashton Wold	60,000	—	—	—	12	—	21	No	2	—	21	36	—	
Glapthorn	223	86	44	27	—	Yes	Ashton Wold	60,000	—	1	1	10	—	14	No	42	—	12	67	7	
Harrington	221	66	—	—	—	—	—	—	—	—	—	8	7	66	No	32	—	12	54	—	
Hemington	122	30	12	18	—	Yes	Hemington	60,000	—	—	—	—	—	—	No	15	—	6	24	—	
Kings Cliffe	884	310	187	104	Yes	—	Apethorpe	25,000	—	—	—	6	4	19	Yes	—	227	201	99	10	
Laxton	108	32	—	8	—	Yes	Harrington	60,000	—	—	—	6	1	24	No	—	—	7	25	—	
Lutton	113	47	30	14	—	Yes	Hemington	60,000	—	—	—	2	—	3	No	22	—	13	30	4	
Nassington	491	154	78	46	—	Yes	Ashton Wold	60,000	—	2	9	15	2	21	No	50	—	27	125	2	
Polebrook	337	96	66	25	—	Yes	Hemington	60,000	—	—	—	2	—	5	No	34	—	35	60	1	
Southwick	171	51	31	—	—	Yes	Ashton Wold	60,000	—	—	—	11	3	20	No	5	—	11	40	—	
Stoke Doyle	96	31	25	5	—	Yes	Hemington	60,000	—	—	—	1	—	1	No	22	—	6	25	—	
Tansor	176	55	31	15	—	Yes	Ashton Wold	60,000	—	—	—	5	—	9	No	28	—	18	37	—	
Wakerley	104	33	—	—	—	—	—	—	—	—	—	2	1	33	No	14	—	6	27	—	
Warmington	517	181	131	40	—	Yes	Hemington	60,000	—	—	—	7	—	10	No	125	—	41	132	8	
Woodnewton	255	84	50	17	—	Yes	Ashton Wold	60,000	—	—	—	5	—	17	No	53	—	21	63	—	
Yarwell	248	143	38	12	—	Yes	Ashton Wold	60,000	—	—	—	15	2	93	No	13	*63	89	52	2	
* Temporary Housing Units with adequate sewage disposal arrangements provided by former users—Military Authorities.																					
OUNDL E AND THRAPSTON (Southern Area)																					
Aldwinle	353	114	59	42	Yes	Yes	Woodford	60,000	—	—	—	8	—	13	No	95	—	32	70	12	
Brigstock	1161	332	202	108	No	Yes	Brigstock	25,000	—	—	—	7	2	22	Yes	—	286	274	58	—	
Chelveston	335	111	62	44	No	Yes	Woodford	—	—	—	—	4	—	5	No	93	—	51	60	—	
Clapton	97	40	24	5	No	Yes	Hemington	60,000	—	—	—	6	—	11	No	23	—	7	33	—	
Denford	306	101	36	57	Yes	Yes	Woodford	—	—	—	—	5	—	8	No	—	52	41	53	7	
Great Addington	976	91	39	34	Yes	Yes	Woodford	60,000	—	—	—	11	—	18	No	—	84	33	58	—	
Hargrave	215	66	26	39	No	Yes	Raunds	60,000	—	—	—	1	—	1	No	62	—	16	50	—	
Islip	685	218	162	51	Yes	No	Islip (private)	50,000	—	—	—	3	—	5	Yes	—	206	205	10	3	
Lilford-cum-Wigsthorpe	130	41	28	9	No	Yes	Woodford and Hemington	—	—	—	—	3	—	4	No	26	—	8	31	2	
Little Addington	271	90	45	42	Yes	Yes	Woodford	60,000	—	—	—	2	—	3	No	—	81	43	46	1	
Lowick	388	112	34	51	No	Yes	Woodford	—	12	—	27	—	—	—	No	106	—	29	83	—	
Luddington	71	21	6	14	No	Yes	Hemington	60,000	—	—	—	1	—	1	No	—	—	4	17	—	
Pilton	82	25	13	5	No	Yes	Woodford and Hemington	—	—	—	—	3	—	7	No	18	—	4	11	10	
Ringstead	995	299	242	46	Yes	Yes	Woodford	—	—	—	—	4	—	11	Yes	—	286	295	2	2	
Sudborough	220	65	54	9	Yes	Yes	Woodford	—	—	—	—	2	—	2	No	48	—	16	49	—	
Thorpe Achurch	164	55	28	23	Yes	Yes	Woodford	—	—	—	—	2	—	4	No	29	—	24	28	3	
Thrapston	1927	588	384	190	No	Yes	Thrapston	50,000	—	—	—	12	—	14	Yes	—	584	581	7	—	
Thurning	94	37	19	16	No	Yes	Hemington	—	—	—	—	2	—	2	No	32	—	4	31	2	
Titchmarsh	558	191	91	94	Yes	Yes	Woodford and Thrapston	—	—	—	—	4	—	6	No	165	—	42	92	57	
Twywell	367	122	33	76	Yes	Yes	Woodford	—	—	—	—	7	—	13	No	—	111	68	48	6	
Wadenhoe	135	42	29	7	Yes	Yes	Woodford	—	—	—	—	3	—	6	No	37	—	8	32	2	
Woodford	1474	423	317	101	Yes	Yes	Woodford	—	—	—	—	2	—	5	Yes	—	418	418	5	—	
TOWCESTER.																					
Abthorpe	272	100	21	72	Yes	—	In village	800	—	—	—	6	2	8	No	96	—	6	89	6	
Adstone	112	36	—	—	—	—	—	—	1	—	20	11	—	16	No	59	—	4	29	3	
Blakesley	376	138	83	47	—	Yes	Outside village	50,000	—	—	—	8	—	8	No	114	—	30	104	—	
Blisworth	792	261	14	35	Yes	—	Outside village	—	3	—	80	49	2	168	Part of village	103	158	65	190	6	
Bradden	89	31	4	—	—	Yes	—	—	2	—	15	9	—	12	No	22	4	9	15	7	
Cold Higham	242	79	17	45	Yes	—	At Grimscote	500	—	—	—	17	—	17	No	79	—	12	65	2	
Cosgrove	426	139	94	40	—	Yes	At Deanshanger	30,000	—	—	—	5	—	5	Under construction	129	—	30	107	2	
Deanshanger	1076	342	326	11	—	Yes	At Deanshanger	30,000	—	—	—	5	—	5	do. (part sewered)	276	56	82	260	—	
Easton Neston	132	33	28	—	—	Yes	Private supply	—	—	—	—	5	—	5	Yes	7	26	28	5	—	
Gayton	362	138	124	5	Yes	—	In village	50,000	—	—	—	9	—	12	Minor part only	104	25	50	74	—	
Grafton Regis	174	76	11	—	1	1	—	—	2	2	33	20	—	31	No	66	—	21	53	2	
Greens Norton	664	277	243	15	Yes	—	Outside village	2,000	—	—	—	6	4	19	Yes	10	255	266	11	—	
Lichborough	222	87	23	59	Yes	—	Outside village	6,000	—	—	—	5	—	5	No	80	—	12	71	4	
Maidford	190	59	—	54	Yes	—	In village	600	—	—	—	5	—	5	No	55	—	4	49	6	
Old Stratford	632	226	214	10	—	Yes	Deanshanger	30,000	—	—	—	2	—	2	In course of construction	219	—	189	35	—	

TABLE VIII—continued.

Parish	Population— 1931 Census	Total No. of houses in Parish	Piped Water Supplies				Non-Piped Water Supplies										Drainage and Sewerage			
			No. of houses served		Sources	Reservoirs	Public Supplies		Private Supplies		Is an adequate sewerage system provided for house drainage	No. of houses with drains discharging to		Closet Accommodation						
			Water laid on	Stand Pipes			Wells	Capacity (gallons)	Wells	Springs		No. of houses served	Wells	Springs	No. of Houses Served	Surface Water Drains	Sewers	W.C.s.	Pail Closets	Privy Midden
TOWCESTER—continued.																				
Pattishall	804	280	35	—	—	Yes			1	—	97	59	1	149	New	226	36	63	207	10
Paulerspury	797	315	242	48	—	Yes	Outside Pury End	33,000	—	—	—	18	—	25	estate only New	237	50	85	218	6
Potterspury	780	302	174	119	—	1	In village	25,000	—	—	—	5	2	9	estate only No	272	—	71	231	—
						public														
						private	At Paulerspury													
Shutlanger	305	91	—	—	—	—			1	2	63	5	1	28	No	89	—	2	79	10
Silverstone and Whittlebury	803 318	359 127	412	—	Yes	—	Whittlebury	25,000	—	—	—	50	—	68	Yes, in	36	323	336	23	—
Slapton	101	36	—	—	—	—			2	3	25	7	1	11	No	32	—	10	21	5
Stoke Bruerne	284	89	—	79	Yes	—	Outside village	1,800	—	—	—	4	3	10	No	76	—	10	73	6
Tiffield	263	61	7	4	—	Yes			2	—	17	12	—	33	No	52	—	12	44	5
Towcester	2252	894	845	11	Yes	Yes	Outside Towcester	50,000	1	—	8	16	2	27	Yes	19	859	843	45	3
Wappenham	301	114	10	—	—	Yes			—	1	14	32	—	80	No	107	—	22	83	9
Weston and Weedon	328	124	22	—	—	Yes			5	1	35	28	1	71	New	100	18	31	89	4
															estate only					
Whittlebury	318	127	SEE	SILVERSTONE	—	—			—	—	—	15	—	21	No	115	—	50	73	4
Wicken	301	115	32	74	Yes	Yes	Outside village	20,000	—	—	—	5	—	9	No	100	—	26	73	6
Woodend	204	70	13	6	Yes	Yes	At Blakesley	50,000	1	—	5	15	—	16	New	57	4	16	45	9
															estate only					
Yardley Gobion	517	207	128	54	Yes	—	In village	32,000	—	—	—	7	—	15	New	136	58	71	136	—
															estate only					
Note: The Rural District Council's Regional Water Supply Scheme, whereby the whole of the Rural District will be provided with a piped water supply, obtained in bulk from the Bucks Water Board, is partly completed, some house connections having already been made to the new mains.																				
WELLINGBOROUGH.																				
Bozeat	1175	405	379	—	—	—	† H.F.R.W.B., Wollaston (water tower)		2	—	26	—	—	—	Yes	—	396	380	25	—
															(New scheme completed 1952)					
Doddington, Gt.	450	223	223	—	—	—	H.F.R.W.B., Gt. Doddington (water tower)	28,000	—	—	—	—	—	—	—	—	211	211	12	—
Earls Barton	2578	914	832	—	—	—	H.F.R.W.B., Earls Barton (water tower) (Reservoir)	50,000	—	—	—	—	—	—	Disposal by irrigation—new scheme in hand	—	882	906	8	—
								50,000												
Easton Mandit	129	42	10	32	—	—	H.F.R.W.B., Grendon		—	—	—	—	—	—	No	28	14	14	28	—
Ecton	447	156	156	—	—	—	H.F.R.W.B., Ecton (water tower)	18,000	—	—	—	—	—	—	Yes	—	144	150	6	—
Grendon	414	128	120	—	—	—	H.F.R.W.B., Grendon (water tower)	12,000	—	—	—	5	—	8	No	—	—	39	89	—
															(Awaiting Ministry permission to start new scheme)					
Hardwick	121	27	5	24	—	—	* M.N.W.B., free supply pumping station at Hardwick		—	—	—	—	—	—	No	—	—	4	23	—
Harrowden, Gt.	130	27	29	—	—	—	M.N.W.B.		—	—	—	—	—	—	New scheme in progress	—	—	7	20	—
Harrowden, Lt.	698	256	221	35	—	—	M.N.W.B., Orlingbury (water tower)		—	—	—	—	—	—	do.	—	238	175	81	—
Irchester	2503	906	874	—	—	—	H.F.R.W.B., Irchester (water tower)	100,000	—	—	—	25	—	32	To irrigation area—overloaded (New scheme being prepared)	—	888	900	6	—
Isham	365	111	104	—	—	—	M.N.W.B., Isham (water tower)	55,850	—	—	—	12	—	17	Yes	—	124	102	39	—
															Sewers discharge to Kettering B.C. disposal works					
Mears Ashby	366	118	101	—	—	—	H.F.R.W.B., Mears Ashby (water tower)	48,000	1	—	15	—	—	—	Yes	—	111	108	10	—
Newton Bromshold	77	22	22	—	—	—	Oundle and Thrapston R.D.C.		—	—	—	—	—	—	No	—	—	6	16	—
Orlingbury	305	85	59	—	—	—	M.N.W.B., Orlingbury	26,000	—	—	—	7	—	16	New scheme in progress	—	81	10	75	—
Strixton Sywell	44	15	—	—	—	—	H.F.R.W.B., Wollaston		—	—	—	—	—	—	No	15	—	2	13	—
	185	108	91	—	—	—	M.N.W.B.		—	—	—	12	—	17	Ex-tensions in hand	—	73	57	51	—
Wilby	394	151	131	—	—	—	H.F.R.W.B., Great Doddington (water tower)		—	—	—	—	—	—	Sewers discharge to Wellingborough U.D. disposal works	—	117	147	4	—
Wollaston	2345	723	690	—	—	—	H.F.R.W.B., Wollaston (water tower)	50,000	—	—	—	20	—	33	Ex-tensions in hand	—	713	719	4	—

† "H.F.R.W.B." = Higham Ferrers and Rushden Water Board.

\* "M.N.W.B." = Mid-Northants Water Board.

